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## ORIGINAL LECTURES.

### CLINICAL REMARKS ON SCARLET FEVER.

*Delivered in the New York Foundling Asylum, April 22, 1882,*

BY PROF. J. LEWIS SMITH, M.D.

**GENTLEMEN:** We call your attention to-day to one of the most important diseases of childhood, viz., scarlet fever. The following history of a case which you have seen, and which has proved fatal, has been prepared for us by the resident physicians, Drs. Kortright and Swift.

Annie K., aged two and a half years, was well, with the exception of an eczema of the scalp, until the night of April 3, when she was attacked with vomiting and diarrhoea. She was feverish and drowsy, and at 2 P.M. on the 4th, the scarlatinous efflorescence appeared upon her neck, body, and lower extremities; tongue coated; pharynx red; temperature (axillary),  $103^{\circ}$ ; pulse, 160. The symptoms and aspect indicated a grave form of the malady, and the usual sustaining treatment was ordered. On April 5 the temperature was  $102^{\circ}$ ; pulse, 144; tongue less coated; eruption fading; less stupor; no albumen in urine. April 6, morning temperature,  $102^{\circ}$ ; pulse, 160; passed a restless night; stools thin and too frequent; has grayish patches in the throat; P. M. temperature,  $103^{\circ}$ ; pulse, 150. April 7, the diarrhoea continues; she has copious muco-purulent discharge from the nose; P. M. temperature,  $103^{\circ}$ ; pulse, 160. April 10, the temperature has continued at about  $103^{\circ}$ ; the patient is very sick, with a constant foul-smelling discharge from the nostrils; breath very offensive; temperature,  $103\frac{1}{2}^{\circ}$ ; pulse about 180. April 12, general appearance a little better, but the posterior surface of the fauces is completely covered by a thick pseudo-membrane; had four loose stools last night; temperature and pulse the same as at last record; a dark and offensive exudation over the fauces, and a dark, foul discharge from the nostrils; examination of the chest negative. April 14, much prostrated; temperature,  $104\frac{1}{2}^{\circ}$ ; pulse rapid and weak; respiration noisy; diminished resonance over lower two-thirds of left side of chest; ulcers upon the mouth and tongue; fauces red and ulcerated. April 17, pulse, 150; temperature,  $100\frac{1}{2}^{\circ}$ ; general appearance somewhat better; the diarrhoea still persists; diphtheritic patches have appeared upon the lips; moist râles in left side of chest. The symptoms continued nearly the same until April 23, when she died. A dull percussion sound and distinct bronchial respiration were observed in the left scapular region during the last days of her life.

The post-mortem examination has been made by our curator, Dr. W. P. Northrup, who will now show you the specimens.

**Autopsy.**—April 22, nine hours after death: body well nourished; the tissues have a jaundiced hue; lips sore; on turning the head to one side pus runs from the left ear, and dirty muco-pus from the mouth. Brain normal; the petrous portion of the left temporal bone has been opened, and the middle ear found full of pus which communicated freely with the external ear through a perforated membrana tympani; the Eustachian tube can not be traced in the sloughy tissue, but there is apparently a passage filled with pus from the ear to the fauces; opposite the greater cornua of the hyoid bone are two deep ulcers, each having about the

diameter of a ten-cent piece, and with sloughy and offensive base and sides; the left ulcer communicates by a ragged and wide sinus with a dark and sloughy cavity of about four drachms capacity; this cavity is located in the neck, under the angle of the jaw, apparently occupying the site of a disintegrated gland.

**Larynx and Trachea.**—The surface of the larynx has a dusky dirty appearance, sprinkled with little cheesy-looking spots and covered by a dirty foul-appearing liquid as if some of the ichorous pus had escaped into it from the neck; about one and a half inches below the vocal chords there is an unmistakable pseudo-membrane; below this, near the bifurcation, the trachea has a bright red color, as if a pseudo-membrane had been peeled from it, leaving the surface raw. The detachment of a pseudo-membrane from this part, if it did occur, must have been ante-mortem, for the organ has been carefully handled in making the autopsy.

**Lungs.**—Between the apex of the left lung and the median line, the tissues of the neck dissected upward, are found indurated, yellow, and giving an offensive odor, showing that the cervical cellulitis had extended downward further than usual. The bronchial glands have undergone hyperplasia, being enlarged and hard. The right lung is normal; about one-half of the left lower lobe is consolidated, and when cut is found to be gangrenous and offensive.

**Abdominal Organs.**—The liver appears somewhat enlarged; the spleen, which is apt to be enlarged and softened in severe infectious diseases seems normal; the surface of the stomach has a congested appearance, and is covered with mucus; mesenteric glands enlarged, pale, and firm; Peyer's patches swollen and pale; at lower end of ileum some pigmentation of these glands; in the large intestine the solitary glands are enlarged and a few of them pigmented, otherwise no marked change in this part of the intestine; kidneys pale; cortex thickened, and markings indistinct.

**Microscopic Examination.**—In the pia mater, perhaps a little increase of cells; meninges of brain otherwise normal. The trachea shows well-marked diphtheritic inflammation; it contains a film of pseudo-membrane; evidences of inflammation occur also upon the laryngeal surface, though less marked than in the trachea. The solidified portion of the lung exhibits the ordinary lesions of broncho-pneumonia with some interstitial change. In the kidneys we find parenchymatous nephritis, with some cell growth in the Malpighian bodies. Gentlemen: Before considering the points of interest in this case, I wish to call attention to certain facts relating to scarlet fever in general, with some of which you may be familiar, but others may be new to you.

The evidence is strong that this disease does not originate *de novo*, for countries have been free from it for centuries, till it was imported by commerce. It was introduced into North America by Europeans about the year 1735, into Iceland in 1827, into Greenland in 1847, and recently into Australia. That it has appeared in certain localities without any known exposure, is attributable to the fact that the poison is so subtle and transmissible that it is conveyed to long distances in packages, books, and even in small articles of merchandise or reading matter.

**Etiology.**—The theory that the acute and indeed the chronic infectious diseases are caused by micro-organisms, or, as they are now designated, microbes, of a vegetable nature, commonly discarded at first, and

considered chimerical, is rapidly gaining ground in the profession. This theory is so important and is attracting so much attention that it will be well to consider the facts in reference to it so far as they apply to scarlet fever.

Unfortunately, as a bar to the successful study by experimentation of the relation of micro-organisms to the infectious maladies which afflict the human race, some of them do not occur in animals, or they occur in a changed and mitigated form, as typhoid fever, the miasmatic fevers, syphilis, and the eruptive fevers. Others, however, can be produced in their typical form in animals, as diphtheria, and others still occur chiefly in animals, and originate in them as chicken cholera and splenic fever or anthrax of the herbivori, known to the French as charbon, and transmissible with all its malignancy to man.

That minute organisms occur in the blood and tissues in infectious diseases, and in immense numbers when the type is severe or malignant, has long been known and admitted, but then the belief held by many, and which seemed very plausible, was that they did not sustain a causative relation to the diseases in which they occurred, but were the result of those diseases; that they quickly sprang into existence in consequence of the vitiated state of the system produced by disease, just as fungi appear on decaying organic substances, or, as an example in the human system, as the oidium albicans quickly appears in certain diseased conditions of the buccal surface and its secretions. Now an important step has been taken in the way of determining whether the microbes are a cause or the result of the infectious diseases which promises to lead to brilliant and decisive discoveries. It has been found possible to cultivate the microbes contained in the blood, tissues, and secretions of certain of the infectious maladies, and, after a series of cultivations, so that these organisms are far removed from the animal substances which contained them, and with which they were so intimately associated in the individual, they have been employed for inoculation, with the important result that the primary disease was reproduced.

These experiments have been made, and the original diseases reproduced after a series of cultivations with the microbe of splenic fever, with that of chicken cholera, that of murrain, recently with that of tuberculosis by Koch, of Berlin, and with the microbes of certain other maladies, so that it now seems as if the general principle will soon be established that minute vegetable organisms are the contagia of the various infectious maladies, of scarlatina as well as of the others.

Perhaps the scarlatinous microbe has already been discovered. In the *London Medical Gazette*, for January 28, 1882, is an account of its supposed discovery by Dr. Ecklund, of Stockholm, a microscopist and parasitologist of repute. He says that scarlet fever is rarely absent from the Swedish capital, and from the barracks and other dwellings on the Isle of Skeppsholm. In the urine of scarlatinous patients he has constantly found a prodigious number of discoid corpuscles, oval or round, their diameter being less than  $\frac{1}{1000}$  millimetre, or from  $\frac{1}{10}$  to  $\frac{1}{100}$  that of the red blood-cell. They are colorless or yellowish-white, surrounded by a distinct cell-wall, and containing a well-defined nucleus of a deeper hue; sometimes one or more nucleoli may be seen. Dr. Ecklund positively asserts that he has found these same organisms in vast numbers in the soil and ground water of the Isle of Skeppsholm, in the mud of the trenches, and in the greenish mould upon the walls of the old barracks, where scarlet fever was most rife. Furthermore, he states that scarlet fever has occurred in children after drinking milk mixed with the ground water of the island, and he observed a case which fol-

lowed immersion in one of the trenches of the island, and drying the clothes in a small room. In one instance, scarlet fever broke out immediately in a block on exposure of the ground water by excavations.

It is evident that the discovery of a microbe under such circumstances does not prove that it is the cause of the disease. This can only be determined by inoculation or by experiments which furnish the conditions of scientific exactness, and we must wait for further light on this interesting subject.

Whatever the specific principle of scarlet fever is, whether a micro-organism or a chemical substance, its effects are well understood from clinical observations. Without doubt it enters the system by the breath, and infects the blood. That it resides in the blood has been ascertained by inoculation with this liquid, which reproduces scarlet fever in its typical form. From the blood it enters the tissues and secretions. Hence handkerchiefs or linen containing the saliva or mucus of a patient, the epidermic scales shed abundantly in the desquamative period, and probably also the urinary and fecal evacuations contain the poison, so that they are highly infectious. Even the discharge of a scarlatinous otorrhœa is believed to be contagious for a considerable period after the primary disease has abated.

Scarlatina is not only communicated by direct exposure to the patient, but also by exposure to objects which happen to be in his room during his illness, and to which the poison becomes attached, such as books and toys.

In England observations have been made which show that scarlatina has been communicated by infected milk. The disease occurred in the family of a milkman, and the milk, before it was distributed, remained for a time in a kitchen which had been occupied by the patients. The milk was taken by twelve families, and in six of these the disease occurred almost simultaneously. At this time cases were so few that scarlatina was not considered an epidemic, and there was no exposure to the carrier, nor to members of the affected family (Taylor). In another instance, a woman and her son had scarlet fever while they were serving milk to several families, and the disease appeared in all these families except one which consisted of old people (Bell). It is known that milk absorbs volatile substances so as to be flavored by them, as is shown in the experiment of placing it in an open vessel in a box with a pine-apple, and it may in a similar manner become infected by the specific principle of scarlet fever, or it may be infected by detached particles of epidermis, which is not improbable, when one convalescing from scarlet fever is allowed to milk the cows or prepare the milk for distribution.

The scarlatinous virus surpasses that of any other eruptive fever, except small-pox, in its tenacious attachment to objects and its portability to distant localities. Hence the literature of this disease contains the records of many cases in which the poison was conveyed long distances, retaining its virulence to the full extent, and causing an outbreak of the malady in the localities to which it was carried. In New York City so frequently has scarlet fever, as well as diphtheria and measles, been contracted in the public schools from the clothing or persons of well children or from books that come from infected houses, that the Health Board now exclude from the schools all children who come from such houses, even though they live on separate floors from those occupied by the patients. In one instance that came under my notice, a washerwoman, whose child had scarlet fever, communicated the disease to an infant in the household where she was employed, by placing her shawl over the cradle in which it was lying. A physician of my acquaintance went from a scarlet fever patient to a family several

streets distant, and took one of their children upon his lap. After the usual incubative period, this child sickened with a fatal form of the malady, and the remaining children of the household were in time affected. In New York scarlet fever has seemed to me to be not infrequently communicated through school-books, which, profusely illustrated by pictures, and rendered attractive to the young, are often allowed to lie upon the bed of the scarlatinous patient, and be handled by him during convalescence, or even during the course of the disease if it be mild.

The young librarian of a circulating library of a Sunday-school, the pupils of which came largely from the tenement houses, was occupied a considerable part of a day in covering and arranging the books. After about the usual incubative period of scarlet fever, he sickened with the disease. His two sisters were immediately removed to a rural township, three hundred miles away, and to an isolated house where no scarlatinous case had ever occurred. About one month after his recovery, and after his room had been fumigated by burning sulphur, and the bed clothes and linen had been thoroughly washed, and all articles suspected to hold the poison had been either destroyed or disinfected, the brother visited his sisters in the country. Three weeks subsequently to his arrival, one of these sisters sickened with scarlet fever, and a week later the other also. It seems that the exposure must have occurred several days after his arrival in the country, from some book or other infected article in his possession. About two months elapsed after the last case, the family had returned to the city, the infected room in the country house had been thoroughly fumigated by burning sulphur for a good part of a day; when a little girl from an inland city remained a few days in this house, and probably often entered the room where the young ladies had been sick. In a few days she also sickened with a fatal form of scarlatina. Such histories and experiences are not unfrequent; they are common during epidemics of scarlet fever. They indicate an extraordinary attachment of the scarlatinous poison to objects, and show that it is not gaseous nor readily volatilized.

(To be continued.)

## ORIGINAL ARTICLES.

### THE FUNCTION OF THE INTESTINAL JUICE.

BY CHARLES L. DANA, A.M., M.D.,

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A SERIES of experiments has been made by me to test the digestive power of the intestinal juice.

The evidence regarding the properties of this secretion has been quite conflicting. This will best be seen by the accompanying table compiled in part by Dr. G. M. Garland,<sup>1</sup> and completed by myself.

My experiments were performed in the following manner: The animals were etherized; a loop of the jejunum was pulled out and ligatured in two places, from one to two feet apart. An opening was made near each ligature, and the intestine between was thoroughly washed out with pure water. Either white of egg, or fat, or starch, was then inserted, and the incisions sewed up, or else two more ligatures were used so as to exclude the openings. The

abdominal wall was then sewed up, and the animals given a small dose of morphia. In four to six hours they were killed, and the contents of the isolated loops examined.

I can think of no positive elements of error in this method, provided it be carefully carried out. Of course, the operation is likely to affect the secretion by lessening or checking it. Consequently, if no results were obtained, it would not show that the intestinal juice is inactive. But positive results would be of value.

*Experiment No. 1.*—Eight-pound dog, full-grown; ligatured and washed out eighteen inches of upper part of jejunum. Dog had been fasting twenty-four hours. Injected 3ij raw egg-albumen beaten up for most part into a foam. Dog nearly died under the opération. Gave  $\frac{1}{2}$  drachm Magendie's solution of morphia; dog recovered, but slept; killed four hours later. Two drachms of albumen only could be recovered; ligatures were tight; tested contents for peptone; no reaction.

This experiment showed nothing, except that under the above method peptone is not formed by putrefaction, nor by action of pepsin said to be found in parenchymatous juices and in nearly all tissues. As to this point, Schiff and Quincke state that glycerin-extracts of intestinal mucous membrane do not digest albumen.

*Experiment No. 2.*—Twenty-pound dog; full-grown; fasting; operated as above. Injected 3ss coagulated egg-albumen finely mashed in a mortar; dog recovered well and walked around. Magendie's solution,  $\frac{1}{2}$  ij were given; intestine opened five and a half hours later; very little secretion on the surface; considerable water had been injected with the albumen, and most of this was absorbed. Ligatures tight; could collect only 3ss to 3j of albumen. Everything was carefully washed off and tested for peptone, with caustic potash and cupric sulphate, first boiling and filtering to remove albumen. The purplish-violet color, showing peptone, was present. It is possible that some of the albumen was lost, but certainly a considerable part was absorbed either as peptone or "precipitable products."

*Experiment No. 3.*—Twelve-pound dog; fasting; opened intestine as before. Injected in one loop, twelve inches long, 3ss olei dulcis; in another loop, three feet below, 3ss coagulated white of egg mashed. Dog recovered well; received a small amount of morphia. Five hours later opened intestine; reaction acid. In the loop where the oil had been placed, recovered 3ij. Ligatures seemed tight, but some oil might have been lost in the injection. At any rate I could see no chyle in the lacteals, either with the naked eye or the microscope. The acid reaction may have been due to the development of fatty acids.

From the loop where albumen had been placed, I recovered about 3ij. This, on being tested as above, showed a strong peptone reaction.

*Experiment No. 4.*—Fifty-pound dog; operated as before. Twenty-five centimetres (3vj) of olei dulcis inserted in a loop of jejunum one foot long; dog recovered well. Six hours later, killed, and

<sup>1</sup> Physiological Laboratory, Harvard Medical College, Boston. Collected papers, 1873-1877, p. 11, Intestinal Digestion.

loop examined. Nearly all the oil was recovered ; reaction of intestinal wall acid ; no emulsion seen ; lacteals not injected ; examination of villi under microscope showed that no fat whatever had been taken up by the epithelium.

*Experiment No. 5.*—Condemned horse; chloroformed. Opened small intestine thirty feet from ileo-caecal valve ; ligatured one and a half feet ; washed out, and inserted  $\frac{3}{v}j$  melted lard. Reaction of intestine was alkaline ; intestine was nearly empty ; horse had not been fed for six hours. Also ligatured three feet of intestine, eight feet nearer stomach ; reaction here was alkaline ; washed and inserted  $\frac{3}{x}j$  hydrated starch ; animal recovered well. Was given morphia q. s. ; six hours later killed. *Recovered  $\frac{3}{v}-\frac{3}{ij}$  of lard*, as near as could be estimated, but

some might have been lost. Lacteals could not be seen to be injected either with naked eye or microscope ; no emulsion seen ; reactions neutral.

From the loop where starch had been placed only  $\frac{3}{x}j$  could be recovered. Tested for glucose ; it gave a very decided reaction. Quantitative analysis showed that there was a little less than one drachm of glucose in the eleven ounces.

The results of the above experiments are summarized in the table. They indicate that the intestinal juice digests albuminous matter, and turns hydrated starch into sugar. This view agrees with the results of the majority of recent experimenters. The evidence regarding the action of the juice on fats is negative, but most experiments show that it has no action, and mine, if anything, confirm that view.

#### ACTION OF INTESTINAL JUICE ON

	ALBUMINOIDS.	STARCH.	FATS.	CANE SUGAR.	GRAPE SUGAR.
BUSCH. Intestinal fistula in a woman, high up.	Protein bodies are dissolved with the appearance of putrescence and the odor of ammonia.	Acts more energetically upon starch upon protein bodies.	Unaffected ; not absorbed unless mixed with bile.	Unaffected.	
THIRY. Artificial fistula.	Fibrin is crumbled in the normal secretion ; this does not occur if the juice be neutralized or acidified. Coagulated white of egg and red muscle are unaffected.	Starch is not converted into sugar.	Unaffected.	No change after hours of digestion.	Intestinal juice has no fermentative influence.
LEUBBE.	Fibrin is crumbled ; other albuminoids are unchanged.	Unaffected.		Cane sugar is changed to grape sugar.	Lactic and butyric fermentation occurs as the result of presence of vibrios.
QUINCKE. By glycine extract.	Fibrin is dissolved occasionally ; raw or cooked flesh and coagulated white of egg are unaffected.	Starch is changed to sugar after a long time.	Unaffected.		Converts sugar into lactic acid after a long time (12 to 24 hours).
SCHIFF. By glycine extract.	Albumen, fresh casein, cooked or fresh muscle are dissolved in the secretion of the duodenum.	Action on starch almost as energetic as that of pancreatic juice.	Oils are emulsified.		
WITTICH.	Fibrin is not digested.	Energetic diastatic action in one instance.			
PASCHUTIN.	Fibrin and other albuminoids are unaffected by water infusions. Action of normal secretion is especially doubtful on fibrin.	Starch is converted into sugar.	Fats are imperfectly emulsified.	Cane sugar is changed into grape sugar by a ferment found only in the small intestines.	Acid fermentation occurs after a few hours.
BERNARD.	Fibrin is the only albuminoid substance attacked.	Acts very feebly on starch.		Chief function of secretion of small intestine is to digest cane sugar ; secretion of large intestine is impotent.	
GARLAND. Thiry's method.	Fibrin is crumbled and converted into peptones, whether the secretion be alkaline or acid. Digestion of coagulated white of egg is doubtful. Fibrin is digested by a 0.2 per cent. HCl solution.	Starch is changed into sugar.			
MASLOFF. <sup>1</sup> By Thiry's method, and by infusion of mucous membrane of dogs and pigs.	Raw fibrin in acid fluid was dissolved. Raw and cooked meat and coagulated albumen were not affected.	Starch changed to sugar in alkaline fluid reaction ; less rapidly in neutral or acid fluid.			
EWALD. <sup>2</sup> Fistula in man.	Turned albumens to peptones.	Starch to sugar.	Fats emulsified.		
COLIN. Thiry's method in a horse.		Starch to sugar.	Fats emulsified.		
DEMANT. <sup>3</sup> Intestinal fistula low down, in man.	No action.	Starch to grape sugar.	Fats with fatty acids emulsified ; neutral fats not affected.	Cane sugar to grape sugar.	
BROWN and HERON. <sup>4</sup> By extracts of the mucous membrane, and other methods.	Not tried.	Starch to grape sugar, slightly.	Not tried.		Maltoze to grape sugar actively.
DANA. Isolating intestine in dogs and horse.	Albumen turned to peptone.	Starch to grape sugar.	?		

<sup>1</sup> Masloff, A., Zur Dünndarmverdauung : Untersuch. aus dem phys. Inst. zu Heidelberg, ii, 3, p. 290, 1878.

<sup>2</sup> Ewald, C. A., Ueber das Verhalten des Fistelsekret., etc. Virchow's Archiv, lxxv, 3, p. 409, 1879.

<sup>3</sup> Demant, B., Ueber die Wirkungen des menschlichen Darmsaftes. Virchow's Archiv, lxxv, 3, p. 490.

<sup>4</sup> Brown, H. T., and Heron, J., Ann. Chem. Pharm., 204, 228. Proc. Roy. Soc. London, 30, 393. They say : The pancreatic diastase turns starch into dextrin twenty per cent., and maltose eighty per cent. The intestinal juice turns these latter into glucose.

We may be asked to explain, if the intestinal juice is inert, how it is that when the pancreatic duct is tied, or when the pancreas is diseased, there is not always a fatty diarrhoea, or much fat in the feces. Bernard, Langendorff,<sup>1</sup> Cash,<sup>2</sup> and others, have shown what medical observation confirms, that such fatty stools do not always occur.

To this it may be said, that in warm alkaline fluids neutral fats may develop *acids and become emulsified*. And Cash<sup>3</sup> has also shown that the gastric juice helps, or can help, develop fatty acids. The same observer asserts that fats may be taken up before emulsification, and that this process takes place, or can take place, within the villi. At any rate, we can understand the possibility of a limited absorption of fat without assuming a specific action of the intestinal juice.

In conclusion, then, it seems very well established that the intestinal juice in some animals supplements the action of pepsin and trypsin on proteids, and turns hydrated starch to sugar. Its *rôle* is probably not a large one as regards digestion, but it may in some way assist absorption; for the intestine in flesh-eaters is pre-eminently an absorptive organ.<sup>4</sup>

Intestinal dyspepsia is, I believe, almost always due either to the stomach's throwing insufficiently digested food into the intestines, or to atony of the muscular walls and defective absorption. The trouble as regards the intestine is, in my opinion, more with muscle and absorption, than with secretion. The stomach may be at the bottom of the disturbance all the time, unloading itself with indecent haste, or with its work half done.

#### A CONTRIBUTION TO CEREBRAL LOCALIZATION.

BY H. J. BERKLEY, M.D.,  
OF BALTIMORE.

THE subject of the present paper was Mr. J. H., of Baltimore, æt. seventy-three, who for many years had suffered from cardiac trouble, both mitral and aortic. It was only about a week before his death that he first came under my care; I found him extremely ill from the defective circulation, and at any moment likely to die.

On looking into the face of the patient, I noticed a peculiar twitching of the left angle of the mouth, localized as far as I could perceive in the zygomatic muscles. No other portion of the face participated in the mono-spasm, and with the exception of a slightly blank look on this side (of the face), there was nothing worthy of remark.

I now inquired of his friends how and when this twitching had commenced, and learnt that it had begun suddenly some thirty months previous, and was unaccompanied, at that time, by either unconsciousness or pain; and that it had since continued regularly, neither increasing nor diminishing from the period of its commencement.

Many years before he had become blind in the

right eye, but the vision of the left was nearly normal, and there was no ptosis on either side.

The tongue was put forth perfectly straight, neither deviating to right or left, the movements of the organ were free, and unaccompanied by any incoordinated motion, and his voice was clear and distinct.

There was absolutely no paralysis of any of the extremities, neither inferior nor superior, and up to a short time before his death he was accustomed, daily, to take considerable exercise.

His mental condition was what one would expect to find in an old man in his dotage, unaccompanied, as far as I am able to learn, by any special peculiarity. Death occurred suddenly.

*Autopsy twenty-four hours after death.*—The thoracic viscera were first examined. The heart and great vessels were greatly diseased. The aortic valves were covered with calcareous plates, and were insufficient; the auriculo-ventricular orifice of the left side was completely surrounded by a bony ring; the mitral valves were thickened, opaque, and, like the aortic, covered with plates of calcareous formation and insufficient. The aorta for some distance beyond the valves was strewn with atheromatous patches. The right side of the heart did not participate in the disease.

The brain: The skull was well formed, the bones of moderate thickness, and were not adherent to the membranes. The dura mater was everywhere of natural appearance. The pia mater was thin, transparent, easily detached from the cortex, was nowhere adherent to the convolutions, not even over the spot of degeneration, and showed no signs of pre-existing inflammation.

The cerebral arteries, anterior and posterior, were strewn with atheromatous patches, even in the smallest arteries visible to the eye, they could easily be seen; but no embolism or rupture could be found, though carefully looked for.

The pia mater was now removed, and the cortex examined. The convolutions were very intricate, well formed; the two hemispheres were quite asymmetrical; in fact, the previous history of the patient showed that he had been a man of very considerable intellectual powers, especially possessing a considerable amount of elocutionary talent. The sulci penetrated deeply between the convolutions.

On the ascending frontal convolution of the right side, one and a half inches above the margin of the Sylvian fissure, in a location corresponding to the seventh centre of Ferrier, a nodule of calcareous degeneration was found of nearly circular shape, three-sixteenths of an inch from side to side, and of a corresponding diameter from above downwards.

The depth was very slight, certainly not greater than the one-half of the thickness of the cortical gray matter. It looked as if many months before there had been an occlusion, probably from an embolism, of one of the smaller surface arteries of the gray matter, which had since undergone calcareous degeneration, a result which not unfrequently occurs in like lesions. The left hemisphere, the cerebellum, the cord, medulla, and pons were healthy.

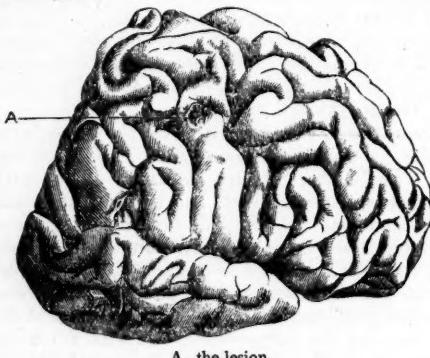
<sup>1</sup> Langendorff, O. Archiv f. Anat. and Phys., 1879, pp.

<sup>2</sup> Cash, M. Archiv für Anat. and Phys., 1880, p. 323.

<sup>3</sup> For discussion of this, see I. Munk's Phys. des Menschen u. der Säugetiere, p. 169.

The case seems to me to be one of the greatest interest in localization of the centres of the face; first, because the foyer is of minimum size, and absolutely unaccompanied by other lesions; and, secondly, because of the few known uncomplicated lesions of this portion of the motor zone of the brain.

Neither Ferrier, Charcot, nor De Boyer describe in their works an unmixed lesion of this portion of the motor zone, and, as far as I am able to discover, it is unique.



Ferrier remarks (*Localization of Cerebral Diseases*), that "the cases on record in which paralysis limited to the face, unaccompanied by aphasia, or paralysis of the hand or arm, has been found in connection with cortical disease, have been due to lesions of the right hemisphere; but in none can the lesion be said to be circumscribed." The three following examples, cited by Ferrier and De Boyer, resemble more nearly the present case than any others.

A case reported by Gowers (*Path. Transactions*, 1876). It was "a case of left hemiplegia, which gradually recovered, with the exception of a very marked paralysis of the inferior facial-muscles. The lesion was a hemorrhagic extravasation in and beneath the upper half of the *præ-central sulcus*, which had pressed upon the convolutions bounding it, viz., the posterior extremity of the middle and superior frontal, and corresponding part of the ascending frontal of the right hemisphere."

The case related by Hitzig "was of a French soldier, who, two months after a bullet-wound on the right side of the head, began to be affected with clonic spasms in the left side of the face. These were followed by transient but complete paralysis of the left side of the face and left side of the tongue. Clonic spasms occurred also in the left hand."

"After death an abscess was found corresponding to the seat of the injury, situated in the ascending frontal convolution, between the *præ-central fissure* and the *fissure of Rolando*.

"It should, however, be noted that there were indications of meningeal inflammation over the whole surface of the right hemisphere, though there was no cerebral softening except in the neighborhood of the abscess."

The third case is related by Hervey (*Bull. Soc.*

*Anat.*, 1874). "This was a case of right facial paralysis with aphasia. A focus of softening was found anterior to the *fissure of Rolando*, at the junction of the third frontal with the ascending frontal convolution of the left hemisphere."

All are complicated, however, by more or less surrounding inflammation, and in the one that corresponds best with our present case, that of Gowers, the paralysis was caused by pressure upon, not disease in, the ascending frontal convolution.

The exceedingly small extent of the degeneration calls attention to the fact that it was an irritative, not a destructive, lesion, and also that the amount of space involved could not possibly cover the entire surface which supplied motor impulses to the muscles that participated in the spasm, otherwise we would have had paralysis, not mono-spasm, of the zygomatici.

In concluding, I must again repeat and recall attention to the main point, viz., that the diseased portion of the cortex was entirely unaccompanied by any other focus of degeneration, either on or within the cerebral hemispheres.

## MEDICAL PROGRESS.

**RESECTION OF THE STOMACH.**—A. W. C. BERN'S (*Nederlandsch Tijdschr. voor Geneesk.*, 1881, S. A.) reports the case of a woman aged 49 years, who had suffered since 1878 with symptoms of chronic gastric catarrh, in whom the objective signs of cancer were first detected in the beginning of 1881. When Berns first saw the patient in April of this year, the entire abdominal cavity as far as the navel was occupied by the tumor and dilated stomach, and as the symptoms of obstruction of the pylorus were increasing in severity, it was resolved to attempt the excision of the tumor. The operation was rendered very difficult by the extensive adhesions formed; the vena cava was exposed for a length of ten centimetres, and a large portion of the pancreas had to be removed. After the removal of two cancerous nodules in the lesser omentum, the pylorus was excised, a wound of twenty centimetres long (two-thirds the length of the lesser curvature) being necessary on account of the existence of isolated cancerous nodules. Billroth's method of uniting the stomach and duodenum was made use of. One hundred sutures and more than two hundred and fifty ligatures were used. The patient lived four hours and a half after the operation, death probably occurring from shock, as the autopsy showed that the stitches and ligatures were all in position, and no blood or intestinal contents had escaped into the peritoneal cavity.—*Centrbl. f. d. Med. Wissen.*, May 27, 1882.

**TREATMENT OF PLEURITIC EFFUSIONS BY RESPIRATORY GYMNASTICS.**—DR. DESCAMPS has studied the action of respiratory gymnastics on pleuritic effusions (*Revue de Théráp.*, April 1, 1882). The conclusions of his paper, read to the Society of Medicine at Antwerp, were as follows: 1. There is, in the treatment of affections of the chest in general, and of pleuritic effusions in particular, an important factor of which but little note has been taken up to the present time, notwithstanding the facility of employing it. This factor is the act of respiration. 2. Deep and regular respiration may be opposed to the impediment to the circulation—to the congestion of the lung, in many cases in which external or internal influences tend to produce it. It may prevent or impede the attack of illness. 3.

When the air inspired is pure and wholesome, a very favorable effect is exercised in declared pulmonary affections by regulating the gaseous and nutritive changes, by maintaining the permeability of the bronchi, by favoring circulation, and removing congestion of the pulmonary tissue, without speaking of the general good effects which are produced by the more complete formation of the blood. 4. In cases of pleurisy with effusion and compression of the lung, the act of respiration, if well regulated, may act in a very favorable manner, or the absorption of the exudation, and on the unfolding and progressive return of the lung to its normal size, by opposing its atrophy. For this purpose, in producing the converse of the tendency which exists in these cases, the breathing should be carried on by the sound lung as little as possible, so as to force that which is compressed to respire and to become dilated as much as possible. This result may be attained by an habitually full and deep respiration, the body being in such a position, whether standing, sitting, or lying, that the filling of the chest may be reduced to a minimum on the healthy side and raised to a maximum on the affected side. In pleurisy, the respiratory action should be put into practice at a suitable time, and should not exclude the preliminary or concomitant use of other means which may be indicated. 5. In cases of thoracentesis, the best method of avoiding the accidents which accompany and sometimes follow this operation is to favor the unfolding and the expansion of the lung by regulated respiratory exercises before, during, and after the operation. 6. The same exercises, both preparatory and consecutive, are very useful in cases of empyema, whether spontaneous or produced by operation. The pulmonary circulation, rendered more easy and more active by more regular and complete respiration, exercises a favorable influence on the general circulation, and may thus contribute to the clearing and to the return to the normal condition of important organs which have either become hyperæmic or inflamed, such as the brain, the liver, the kidneys, the peritoneum, through the liver, and the intestines themselves.—*London Med. Record*, May 15, 1882.

**THE REMOVAL OF NASAL POLYPI.**—DR. MORELL MACKENZIE discusses the various operative methods of removing nasal polypi and states that the mode of treatment he generally adopts is to remove the polypi with his punch-forceps and then to apply the electric cautery to the base of the growths. This method will generally succeed in effecting a rapid cure, but when recurrence repeatedly takes place, if the growth springs from one of the turbinated bones, he removes the portion of the bone from which the polypus originates by means of a special instrument which he has devised for the purpose. It consists of fine hollow forceps having toothed edges on one side and smooth edges on the other, whilst between the two a sharp cutting blade can be rammed down. The portion of the turbinated bone required to be removed is seized by the forceps, the smooth blade being on the outer side. The knife is then pushed home and the portion of the bone easily removed. He wishes it to be understood, however, that though he considers the removal of a portion of one of the turbinated bones perfectly harmless, he regards it as an operation rarely required.—*Arch. of Laryngology*, April, 1882.

**EPIDEMIC CEREBRO-SPINAL MENINGITIS.**—The seventeen cases which JAFFÉ relates (*Deutsches Arch. f. klin. Med.*, Bd. xxx., H. 3 and 4, 1882), and which were mostly observed by himself, are not recorded for the purpose of setting up new theories concerning cerebro-spinal meningitis, but are intended to correct many errors which exist in regard to etiology, etc. He,

therefore, first gives a summary of cases of like nature and of the results of all observations. The author maintains that the meningitic virus is a specific one, and considers it a waste of time to endeavor to prove its connection with other infectious diseases. It is certain that the disease in question is a specific infectious one, which may occur sporadically as well as epidemically, and may be spread by contagious as well as by miasmatic influence. As we are not yet clear as to the nature of the virus, we must, for the present, consider the two questions, as to the origin of the virus and the etiology of the disease, as unanswered; but, as a fact, we can record that it exists, and, as probable, we may assume that it is less a miasma than a contagium. Whether it be fixed or volatile, whether "vivum" or otherwise, or if parasitic, we know not as yet. Jaffé has examined, microscopically, the blood and exudations found in the cerebro-spinal cavities, but has found no organisms of any kind. He feels himself justified, therefore, in denying that cerebro-spinal meningitis is a parasitic disease (from a modern point of view).

Prodromal symptoms were found in ten cases. Headache occurred in fourteen, vomiting in fourteen, and delirium in ten cases; of the latter, two were of a maniacal character, and had been admitted as suffering from delirium tremens. Episthotonus occurred sixteen times; hyperesthesia, eight; anesthesia, once only; ocular changes, ten times; aural troubles, once, in the form of purulent otitis media, with perforation of the membrana tympani. In two pneumonia, in one bronchitis, and in one gangrene of the lungs occurred. There were two cases of ulcerative endocarditis, complicated once with purulent pericarditis. Splenic swelling was observed thrice, passive albuminuria once, arthritic affections five times.

The duration was two or three days as the minimum, four months as the maximum. Ten cases ended in death, seven in recovery; the mortality being 59 per cent. The diagnosis is most difficult in the early days of the sporadic cases. We have to distinguish between the diseases idiopathic (traumatic) spinal or cerebro-spinal meningitis, tubercular meningitis, typhoid fever, intermittent fever, asthenic pneumonia, tetanus, delirium tremens, and acute mania. The etiology of the first disease is an important aid, but it must be borne in mind that wounded persons are most sensitive to the meningitic virus; it is often impossible to distinguish tubercular meningitis, as two of the reported cases show. Typhoid fever is recognized by the gastric symptoms, which soon appear, and the absence of spinal symptoms, as well as the presence of the splenic tumor; intermittent fever by the beneficial effect of quinine. The other diseases are distinguishable in their further progress.

The treatment consisted in the application of ice to the spine and administration of narcotics, calomel in large doses, lukewarm and cold baths. The author found abstraction of blood, prolonged baths, and the administration of antipyretics to be useless, the latter disturbing the digestive faculties and lowering the patients.—*London Med. Record*, May 15, 1882.

**EXTIRPATION OF A CYSTIC TUMOR IN A BLEEDER.**—C. THIERSCH, in the *Arch. f. klin. Chir.*, xxvii. p. 265, reports a case in which he undertook the extirpation of a cystic tumor situated over the zygoma of a patient with marked hemorrhagic diathesis, hoping to be able to restrain the bleeding by moderate pressure under Lister's dressing until the vessels had closed. In spite of the ligation during the operation of twelve small arteries and the closure of the wound with eight catgut sutures, a few hours afterwards, when the pressure had to be reduced on account of the pain it was causing,

numerous extravasations formed on the forehead, cheeks, eyelids, upper lip, and gums, and when the dressing was removed on the third day, the wound was found to be distended with blood, so destroying any hope of primary union. This bleeding continued up to the entire closure of the wound, and on the eighth day an artery spurted as if freshly cut. On the thirty-ninth day the patient was discharged cured, having from the eighteenth to the twenty-third day suffered from an attack of facial erysipelas, while for weeks the extravasations continued, causing a mottled appearance of the entire face and neck. The difficulty in the healing of wounds in bleeders, is, as this case shows, not only in defective formation of new vessels, but also, even under the Lister dressing, of preventing bleeding by pressure, and consequently rendering healing by first intention impossible.—*Centralbl. f. d. Med. Wissen.*, May 27, 1882.

**THE SOURCE OF BOTHRIOCEPHALUS LATUS.**—Many investigators have occupied themselves with the problem of the source of bothrioccephalus latus. Knoch, twenty years ago, believed that he had solved it, and that the ovum or embryo taken into the intestinal canal of a dog developed there into a perfect tapeworm, without passing through an intermediate stage in any other habitat. But this conclusion was not confirmed by others, and, in the opinion of Leuckart, Kuchenmeister, and others, is certainly erroneous. Other statements on the subject amount merely to more or less probable suspicions founded on what has been ascertained of the origin of other tapeworms. Our knowledge of the subject has, however, been materially advanced by an investigation by Dr. Braun, of Dorpat, a locality where the worm is comparatively frequent. He has published an account of his researches in a recent number of Virchow's *Archiv.* He started with the assumption, justified by all known facts regarding the history of other tapeworms, that, like them, the bothrioccephalus must have an intermediate stage, and therefore presumably a change of host. Recorded facts show that all animals in the intestines of which bothrioccephalus has been found, are fish eaters, either entirely or partially, and, further, that an organism has been detected in fishes which has been regarded as the early form of bothrioccephalus. An investigation of various fish brought to the market at Dorpat showed that some had, encapsulated in the intestine, the early asexual forms of bothrioccephalus. This, however, was not sufficient, since the intestines of fishes are not eaten by man, and the presence of the organisms in them would not account for the occasional endemic prevalence of the disease. Braun therefore examined the parts of the fish which are eaten, especially the muscles, the sexual glands, and the liver, and he found in the pike (*Esox lucius*) numerous young bothrioccephali not only in the above parts, but also in the spleen and other viscera. They were found in almost every pike brought to the market. Hence, an infection of man can readily occur, and in that district the pike is common, and is extensively eaten by the lower classes. The scolices were also found abundantly in the eel, which is also a favorite article of food. It remained to be proved, however, that the muscle scolex of the pike or eel was capable of giving rise to the adult form. A number of experiments were therefore undertaken with the cat and dog, which were fed with the infected muscle. In no case were either ova or segments of bothrioccephalus found in the feces before the special diet was commenced, only the ordinary *taeniae* of these animals. When, however, the organisms from the pike were added to a strict diet, including, as the only drink, distilled water, segments of bothrioccephalus were found in the faeces, and in one case, in the cat, the sexually

ripe form of bothrioccephalus was obtained, corresponding perfectly with that of man. The practical consequences of this conclusion are sufficiently obvious.—*Lancet*, June 3, 1882.

**COMMUNICATION OF THE LUNG WITH THE AORTA.**—Dr. BOHAY presented to the Medical Society of Budapest, the specimens obtained from a case of phthisis pulmonalis, in which a cavity in the apex of the left lung communicated by an opening four millimetres in diameter with the left side of the arch of the aorta, which was as thin as paper and drawn over to the left side by adhesions to the lung. The aneurism was not diagnosed during life. Such cases are extremely rare, Rokitansky having only seen one similar one.—*Journ. de Méd. de Paris*, June 3, 1882.

**PILOCARPINE IN DIPHTHERIA.**—We described, a few months ago, the results obtained by a number of Continental observers on the treatment of diphtheria by the method recommended in such eulogistic terms by Guttman: the administration of pilocarpine with the view of effecting the detachment of the false membranes by the secretions produced. Those results were to some extent contradictory, although the balance of opinion was strongly against the method, as rarely useful and often fraught with no small amount of danger in many cases. This conclusion is strongly confirmed by the subsequent experience of several physicians who have used pilocarpine. The results they have obtained have been lately summarized by Dr. Picot in the *Revue Médicale de la Suisse Romande*. Demme, for instance, in nineteen cases thus treated, failed to observe in most of them any arrest of the spread of the false membranes, and in nearly half the cases tracheotomy had to be performed. In two or three cases of moderate degree of severity pilocarpine seemed to be of some service, but its use was not exempt from difficulty, especially on account of the various tolerance exhibited by children, so that doses which in some produced alarming collapse were well borne by others. Of three cases reported by Payrandéau, two were children, and both died in a state of collapse. No favorable result was obtained by Faludi, of Pesth, and an extensive trial of the method by Archambault more than confirms the doubtful opinion which he previously had expressed. He treated eighteen cases by this method, and only three recovered, although eight of the cases are said to have been of a benign form. No larger proportion recovered, however, of those which were treated by other methods, but the detailed observation of his cases has led Archambault to the conclusion that the effect of pilocarpine is positively injurious. The abundant diaphoresis exposes the patient to risk of catarrh, and the abundant mucous secretion produced, in itself involves a danger to respiration. Schmid, Laschkowitz, and Charkow, have met with only unfavorable results. Of ten cases treated in this way by the latter, all died. The experience of several other physicians—Saint-Denis, Lewin, Warschauer, Dentan, Maunier, and Ferrière—has been scarcely less unfavorable, although not equaling the disastrous experience of Bernier de Bourdonville, who failed to save a single one of seventeen patients thus treated. A very small minority of those who have written on the subject consider the treatment of positive utility. Most of these seem to have drawn their conclusions from mild cases, and it may be noted that one of them—Duchini—lost four out of five cases thus treated. Almost all agree that the influence of the drug is confined to the detachment of the false membranes; that it has no influence on the poison itself is shown by the fact that it is powerless to prevent relapses.—*Lancet*, June 3, 1882.

TREATMENT OF PHthisis BY INHALATION.—DR. STRETCH DOWSE read a paper on this subject before the Northern District Branch of the British Medical Association. He prefaced his paper by referring to the recent very valuable discovery of Dr. Koch, concerning the tubercle-bacillus; and he thought that the inflammatory theory of tubercle, and Dr. Sanderson's recent lectures at the College of Physicians on Inflammation, tended to support rather than to detract from the results of Dr. Koch's original investigations. Dr. Dowse, through the kindness of Dr. Blake, was enabled to show to the members present many forms of respirators, including one of Dr. Blake's invention, which were useful and adapted for the purposes of inhalation. Dr. Dowse said that it was more than ten years ago when he first began to treat pulmonary consumption by inhalation; and he regretted that, until recently, he had not carried out his experiments with that care which so important a subject demanded. During the months of September, October, November, and December, 1881, he had treated his patients, in the North London Hospital, for consumption, by several forms of inhalation; and he almost invariably had good results. He thought, however, that the process of inhalation was far from perfect, and he hoped for better results in the future. Short histories and notes of several cases were brought forward, as evidence in favor of this mode of treatment. He spoke particularly of the value of acetic ether as an inhalant; in fact, he went so far as to say this drug was, in his opinion, capable of dissolving nascent tubercle. The mixture which he generally used had the following composition: R. Thymol. 3ij; ætheris acetici 3ij; ætheris sulph. 3i; creasoti 3ij; acidis carbolicis 3xv; terebinth. ad 3iv. Ten drops to be used at a time for an inhalation. He laid great stress upon continuous inhalation: for instance, two hours morning, afternoon, and evening, as well as during the whole night.—*Brit. Med. Journ.*, May 27, 1882.

DISTINCTION BETWEEN CADAVERIC AND PLANT ALKALOIDS.—H. BECKURTS (*Arch. der Pharm.*, Feb. 1882) has made a number of experiments as to the relations between these alkaloids. Since the knowledge of the fact that in dead bodies, through the influence of putrefaction, alkaloidal bodies—septicines, or the ptomaines of Selmi, may be formed, which, in their chemical reactions, show a behavior quite analogous to that of the plant bases, the attempt has been repeatedly made to discover characteristic points of distinction between them.

General reactions, by means of which it may be readily and certainly decided whether a plant alkaloid or one of so-called ptomaines is in question, have remained as yet unknown. The discovery of such must also remain for the present at least problematical, as long as the knowledge of the chemical nature of the ptomaines remains so deficient, and when under the latter designation an entire group of compounds is comprehended, the members of which, apparently, formed under the same conditions, exert a varying physiological action, and probably stand also in very loose chemical connection. Our interest, therefore, must be attracted the more to a recently published essay of Brouradel and Boutmy (*Comptes Rendus*, 1881, p. 92, 1056), wherein they maintain to have found in potassium ferricyanide a reagent which will distinguish these two classes of bodies. Plant alkaloids, according to the statements of these chemists, do not change this salt, whereas the ptomaines reduce the same at once to potassium ferrocyanide, which may be recognized by a precipitate of Prussian-blue on the addition of a ferric salt. An exception to the rule is morphia and veratrine, of which the former has a strong reducing action, the latter to a lesser extent.

The importance of this statement for forensic chemistry induced the author to repeat the related experiments, but only with regard to the behavior of the plant alkaloids towards potassium ferricyanide, as the reducing action of the ptomaines has been emphasized by all investigators as a characteristic property, and therefore, does not require a repeated confirmation by experiments.

The experiments were so conducted that for each a centigramme of the alkaloid was dissolved in five cubic centimetres of water with the aid of dilute sulphuric acid, then two drops of a ten per cent. solution of potassium ferricyanide added, and subsequently one drop of a very dilute neutral ferric chloride solution.

Morphia and colchicine reduced the potassium ferricyanide very strongly; the mixture, upon the addition of ferric chloride, became immediately dark-blue. A less strong, but still plainly perceptible reduction, recognizable by the formation of a greenish-blue liquid after the addition of ferric chloride, and from which immediately, or after a short time, flocks of Prussian-blue were precipitated, was effected byaconitine (English and German), brucine, conine, digitaline, nicotine, strychnia, papaverine, narceine, codeine, and, in accordance with the statements of the named chemists, veratrine. To these may also be added picrotoxin (in natural solution), while atropia produced no reduction.

If it be accepted that the ptomaines which, according to a recent investigation of A. Casali (*Gazz. Chim.*, 1881, p. 314), are considered as amido acids, possess a stronger property of reduction than most alkaloids, it is seen from the communicated experiments that a distinguishing reaction between plant poisons and ptomaines with regard to their behavior towards potassium ferricyanide cannot be observed.

The author finally mentions that he is still occupied with the examination of the crystalline or amorphous precipitates which are produced by potassium ferricyanide and ferrocyanide with the alkaloids mentioned.—*Amer. Journal of Pharm.*, May, 1882.

TREATMENT OF TYPHOID FEVER WITH QUINIA AND SALICYLIC ACID.—At the meeting of the Société Médicale des Hôpitaux, held May 26, M. LEREBOUTEL read, in the name of M. SOREL, a paper on this subject. This memoir, suggested by the researches of M. Hallopeau, is based upon an analysis of ninety-seven cases. Instead of first employing calomel, as advocated by M. Hallopeau, M. Sorel gives from 50 centigrammes to 1.8 gramme of sulphate of quinia in the morning, and from 2 to 4 grammes of salicylate of soda during the day, its use during the night being suspended if the antipyretic effects appears to have been sufficiently marked. The simultaneous use of these two drugs can be long continued with evil effects, without producing ringing in the ears, delirium, marked dyspnoea, epistaxis, or intestinal hemorrhage; abundant sweats and eruptions of sudamina are the most frequent effects, and can, without doubt, be attributed to the salicylate of soda. This treatment does not interfere with the simultaneous treatment of complications, should they arise, and tends to render the temperature curve horizontal, though it does not shorten the disease or prevent complications.—*Gaz. Hebdom.*, June 2, 1882.

TREATMENT OF HEMORRHOIDS BY FORCIBLE DILATATION OF THE ANUS.—Having referred to the dangers accompanying the usual methods of radical treatment of hemorrhoids, i. e., excision, ligature, and cauterization, PROF. SUBBOTIN (*Mejdunarodnaia Clinica*, No. 1, 1882) advocates a fourth method, which is alleged to be entirely free from such dangers as subsequent pyæmia, stricture of the anus, secondary hemorrhage, general

peritonitis, etc. This operation is forcible dilatation of the anus and lower part of the rectum, recommended, about thirty years ago, by Maisonneuve, and, after many years of oblivion, in 1876-77, again introduced into practice by Verneuil and Fontan, and later by Guyon, Trélat, and other French surgeons. The author, from his own experience, draws attention to the simplicity, safety, rapidity of curative action, and efficiency of this method, which is described by him as follows. On the day before the operation, the bowels are thoroughly opened by a purgative; and, immediately before the dilatation, the rectum is washed out by an enema. The patient being brought under the influence of chloroform, and placed on his left side, with his thighs fully flexed, the operator stands behind the patient and introduces a bivalved Recamier's anal speculum. Then he gradually and cautiously opens the speculum (introduced down to its handle); and, when all the rugae of the anorectal mucous membrane have been effaced by stretching, he leaves the instrument opened to its widest extent *in situ* for two or three minutes, and then removes it. With this action the treatment comes to an end, no after-treatment being required. The operation lasts about six to eight minutes. The immediate effects of the dilatation consist: 1, in a paretic state of both rectal sphincters, which exists three or four days, and then is followed by normal contraction of the parts; and 2, in complete relaxation or disappearance of the hemorrhoid varices. Small piles usually disappear at once, never to return; large ones remain visible for some time after the operation as soft, lax, and empty capsules. These are gradually diminished, and, as a rule, finally disappear, or remain in the shape of simple polypi, causing no discomfort to the patient. According to the author, the action of dilatation in the treatment of hemorrhoids is twofold. First, by relaxing the sphincters, it removes the cause of stagnation of blood in the beginnings of the hemorrhoid veins; and, secondly, it expels the contents of the varices and compresses their walls in such a way as to cause their adhesion and obliteration of the cavity. Prof. Subbotin points out only two contra-indications to forcible dilatation. They are, suppuration and incipient gangrene of the piles. In cases of highly tense and irreducible hemorrhoids, he advises that the operation should be done in two stages: first, dilating by means of the fingers alone, and, some days later, proceeding with instrumental dilatation.—*London Med. Record*, May 15, 1882.

**INTER-CRICO-THYROID LARYNGOTOMY.**—At the meeting of the *Société de Chirurgie* held April 26, 1882, M. NICAISE read a report on the work of M. Richelot on this subject, and a second report on M. Krishaber's work with the same title.

M. CHAUVEL recognized the difficulties alluded to by the reporter, and cited a recent case where it had been almost impossible to insert an ordinary tracheal canula.

M. DÉSPRES mentioned that the first suggestion of the advantage of incising the cricoid was due to Boyer, but since then the incision had been nearly entirely abandoned, except in exceptional cases, where a modified incision was employed. Nélaton proposed the resection of a part of the cricoid cartilage, and M. Déspres published in 1861, in the *Gazette de Hôpitaux*, an account of a case so operated on by Nélaton for edema of the glottis occurring in pregnancy. M. Déspres had himself, also, performed inter-crico-thyroid laryngotomy for a case of polypus of the larynx, and he recognized the advantages of the operation as facilitating subsequent manipulations in the larynx, or for the removal of foreign bodies, but thought it was unsuitable where it was desired to allow a canula to remain; and he cited a case where the presence of the canula rendered

deglutition so painful that the cricoid had to be incised. He is therefore resolutely opposed to the operation.

M. VERNEUIL, on the other hand, is a warm advocate of this method; he believes it to be easy of performance, exempt from the inconveniences and dangers of tracheotomy, and is often the only operation possible; and he has also found that ordinarily the permanent use of the canula is not objected to by the patients. He performed the operation in a case of epithelioma of the larynx, and the patient wore the tube for twelve months without any inconvenience; he also had a similar result in a case of epithelioma of the pharynx, which necessitated the opening of the larynx from the suffocative attacks following the great glandular enlargement. This patient, who is still alive, suffers no annoyance from the presence of the tube, and can even speak without closing it. He had employed the thermo-cautery in these two cases, and not a drop of blood had been lost. In the second case the neck was extremely short, and it was impossible to extend the head without causing suffocation, so rendering the ordinary operation of tracheotomy inapplicable. He thought, however, it should be remembered that the crico-thyroid membrane might be exceptionally elastic, and so prevent the entrance of the canula.

M. FARABEUF had performed this operation fifty times on the body of adults and old people, and had found that the operation, as regards difficulty, was not comparable with tracheotomy. MM. MARC-SÉE, LANDELONGUE, and Pozzi also spoke in favor of the operation.—*Le Progrès Médical*, April 29, 1882.

**ABLATION OF FUNDUS UTERI BY ABDOMINAL SECTION.**—At the meeting of the Surgical Society of Ireland, held April 14, DR. ATTILL read a paper on ablation of the uterus, in which, after contrasting the various operations in use for the partial or complete removal of the uterus, and the results obtained by different operators in each method, he gave the details of a case in which he had recently performed a modification of Porro's operation. The patient, a woman aged 58, was first seen by Dr. Attill in October, 1881. The os and cervix uteri were healthy; but the fundus was enlarged, the sound passing two inches and a half. A clot of blood was daily expelled from the uterus when the pain came on. Not being certain of the condition of the fundus uteri, Dr. Attill dilated the os and cervix, but found no tumor, as he had partly expected from her previous history. He, therefore, concluded that the disease was malignant, and advised removal of the uterus above its insertion into the vagina. The operation was performed on January 16, 1882. An incision commencing one inch above the umbilicus served to open the pelvic cavity; the fundus uteri was seized, whilst a ligature was passed round the suspensory ligament at either side. The ovaries were found atrophied, but were not removed. A ligature was passed round the neck of the uterus; the fundus cut off; and the raw surface of the stump was touched with the actual cautery, and allowed to go back into the pelvis. The wound in the abdomen was then sewn up. The operation lasted an hour and a half. At 7 P.M. on the day of operation, the temperature was 99°, and the pulse 108; and within twenty-four hours the woman died. The walls of the fundus uteri were thickened and epitheliomatous; and the stump, which had been thrown back into the pelvis, was not free from epithelioma. This was the first case of epithelioma of the cervix uteri which he had seen. It was, therefore a rare affection; so that he was not certain of the exact nature of the case up to the end of the operation. He regarded the operation by abdominal section as a safer one than that through the vagina, though the latter was usually done for epithelioma.—*Brit. Med. Journ.* May 27, 1882.

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SATURDAY, JULY 15, 1882.

## RECENT CONTRIBUTIONS TO THE THERAPEUTICS OF MALARIAL DISEASES.

UNTIL we get some exact information regarding the nature of that mysterious miasm—malaria—our therapeutic resources will be largely empirical. Guided partly by more exact notions derived from the study of its physiological actions, and partly by clinical experience in its use, we now employ quinia more accurately and efficiently than was possible a few years ago. Not to speak of such well-worn topics as the antipyretic action, and the administration of large doses, we will ask the attention of our readers to the subcutaneous injection of quinia, which, although not a frequent mode of applying the remedy, is sometimes of immense utility, as in pernicious intermittent and remittent fever, and in obstinate cases of the ordinary forms. Exceeding difficulty has been encountered in the preparation of a suitable solution. Quinia, in an undissolved state, and in acid solutions, has caused great mischief. The hydrobromate, originally proposed by Gubler, possesses several distinct advantages: it is comparatively soluble in water, produces very little local irritation, and is effective. It is soluble in the proportion of 48 grains to 3*iv*, so that 20 minims contain 4 grains. A new compound salt of quinia and urea has been introduced recently. This proves to be more soluble than any other preparation, and is less irritating, no after-redness and swelling occurring. It seems to be soluble in the proportion of 50 per cent., that is, a saturated solution in water will contain one-half by weight of the salt. The quantity of urea—somewhat less than one-tenth—which is present in the compound salt is not objec-

tional. The name by which it is known is sufficiently complicated—*quinia bimuriatica carbamidata*. *Quiniae et ureæ bimurias* expresses the composition, and might, therefore, be substituted for the more difficult and confusing original title.

Numerous remedies have been brought forward as substitutes for quinia, and, indeed, so closely are the chemists approximating to it in composition that an artificial quinia, produced by synthesis, may be expected in a short time. Resorcin, hydroquinone, pyrocatechin, and chinoline are recent products of the chemist's art. Of these, chinoline has excited the deepest interest, because itself, a derivative of quinia, approaches nearly to it in composition. The confident expectations at first entertained that in this we had a remedy of value nearly equal to quinia, are not supported by a larger clinical experience. It has proved very irritant to the stomach, is depressing, and greatly inferior to quinia in antiperiodic power. All of this group—the dihydroxol-benzol group—possess more or less of the antiseptic, antipyretic, and antiperiodic power, but they are far less effective than the cinchona alkaloids.

Carbolic acid possesses some valuable properties as a remedy in malarious diseases. The highly irritable stomach of acute malarial poisoning is usually quickly relieved by small and frequently repeated doses of carbolic acid. Fifteen years ago, Dr. Tessier, of the Mauritius, announced that intermittents are rapidly cured by the subcutaneous injection of three-quarters of a grain of carbolic acid, dissolved in twenty minims of water. This observation attracted but little attention; yet it is true, although there may be limitations. No exact observations, on which a rule of practice may be formulated, have yet been made; but the fact may be stated that simple intermittents, without lesions of the spleen and liver, are often cured by the subcutaneous injection of carbolic acid. These injections give but little pain at the moment of introduction of the needle, and this pain is followed by anaesthesia. To obtain sufficient curative results, they should be inserted about three times a day during the intervals between the paroxysms.

Recently the alkaloid *pilocarpine* has been used to abort the ague. If administered at the moment when the first chilliness, or other disturbance, indicates the onset of the paroxysm, the sweating stage is at once inaugurated, thus preventing the chill and fever. The quantity of the nitrate or muriate of pilocarpine necessary to effect this, will range from one-eighth to one-quarter of a grain, subcutaneously, for an adult. The vaso-motor and cardiac depression which succeeds to the preliminary stimulation must not be forgotten in an estimate of the probable results. Although by this practice an

impending intermittent may be aborted, it does not follow that subsequent attacks will be prevented. In some instances, it appears, an intermittent has been arrested by a single administration of pilocarpine. Thus far there has been no published experience on the use of pilocarpine in pernicious malarial fever, in which, indeed, it promises a high degree of utility. *Apropos* of this formidable condition, we should not fail to mention the very great utility of *amyl nitrite*, subcutaneously, in the algid stage of pernicious fever. From two to five minimis may be injected, and repeated at intervals determined by the cessation of the effects. This practice serves a double purpose: the remedy substitutes warmth of the surface and an active circulation for the coldness and depression, and gives time for obtaining the full effects of quinia.

Within a few years *iodine* has come to be regarded as a remedy for malarial diseases, of considerable value. As compared with quinia, it is relatively more efficient in chronic than in acute malarial poisoning. Compared with quinia, and the members of the benzol group above mentioned, iodine takes rank next after quinia. The tincture, the compound tincture, and the compound solution, are the preparations usually employed, and of these, the last mentioned is least objectionable. Iodine agrees with the other remedies used against malarious diseases in antiseptic power, but differs from them in having no antipyretic action. This fact casts a much-needed illumination on the nature of the causes producing malarial disease, indicating that the *materies morbi* is a ferment or a minute organism. The action of iodine on albuminous substances, serves to indicate the nature of the effect it has on germs and ferments. Although iodine solution, promptly administered, will cut short a considerable proportion of intermittents, it has not the antiperiodic power of quinia. It has an important place as a remedy for the complications of malarial fevers, for the enlarged spleen, the congested liver, and the pigment formation and deposit. It is good practice to utilize the effects of carbolic acid and of iodine in the treatment of these complications, and as aids to the curative action of quinia. For example a combination of the two in small quantity and frequently repeated (R. Tinct. iodinii comp. 3ij; Acidi carbolici, 3j. M. S. One drop every hour or two) is an efficient means of checking the vomiting, which is often a most embarrassing complication of acute malarial poisoning. Whilst it thus prepares the way for the stomachal administration of quinia, it exerts no little antiperiodic power. If full doses of quinia are given to prevent the febrile paroxysms, and in anticipation of them, iodine and carbolic acid can be administered in the intervals. Beside the internal use of iodine prepa-

rations, the local application of the official ointment of the red iodide of mercury is in a high degree efficient as a remedy for enlarged spleen and liver. This practice, derived from the physicians of India, should be carried out with attention to certain details enjoined by them. A piece of the ointment, the size of a pea, is rubbed in thoroughly over the whole splenic or hepatic region, the part being exposed to the direct rays of the sun, or to the heat of a bright open fire. After one or more frictions with the ointment, the epidermis shrivels and is detached, leaving the true skin somewhat red and irritable. Applications must be suspended until the skin is in a condition to bear them. The number of applications required cannot be stated beforehand, but that they are effective in reducing the size of the enlarged spleen, and in diminishing the congestion of the liver, has been proved by an abundant clinical experience.

Within a few years past *eucalyptus* has been brought forward as a remedy for malarial diseases, and at one time quite an exaggerated estimate of its powers was current in the medical profession and in the community. It soon found its proper place as an adjunct to more efficient remedies, and as a tonic and restorative after malarial attacks had been arrested. Within these limits it is useful, but as the principal remedy it is far inferior to some of those mentioned above.

#### SUMMER SPORTS.

WE hail with not a little pleasure the increase of out-door, and, therefore, especially of summer sports and pastimes among us. As a people, we work too long and too intensely. Time was when every one was expected to be at his business from early till late. Close rooms in winter, hot rooms in summer, made havoc with health. When business did not drive the man, the man drove his business. Little, if any, time was given to recreation. Saint's days we have none, and patriotic holidays are few and far between.

True for the men, this state of things was truer still as to women. After a girl reached an age and a size when modesty forbade her indulgence in the sports and games of children, what was there for her to do? She could play with "grace hoops" or battledore and shuttlecock, but soon tired of them, even if she ever began them; or could ride, which was expensive and often impracticable; or could walk, provided she had company: the result was that practically she sometimes walked to school and back, or to do a little shopping, attended to a few in-door household duties, studied, read novels, went to parties, to church, to places of amusement, married, and became at once both a mother and an invalid.

We are glad to recognize a change within the last score of years, and especially, perhaps, the last five or ten. Out-of-door sports and games have grown steadily and rapidly in favor. Cricket and base-ball, rowing and archery, croquet and tennis, have made many converts, and the young men of our cities—for it is of our city population that we are especially writing—are losing the pallor and leaness which was their wont, and are gaining in color and weight and freshness.

Such games do far more than merely effect a physical development. Their mental and moral influences are quite as important. A good cricketer, other things being equal, has a manliness developed in him that is worth a deal. Bodily vigor breeds independence of character. The ability to defend the weak predisposes to the chivalric virtues. Alertness of observation, preciseness and delicacy of muscular co-ordination, decision of character, personal bravery, generous rivalry, and all the better social qualities are developed by such sports. And these will tell in sterner times when the strain of accident or misfortune comes and tests the stuff we are made of.

But it is a still greater boon for women. Some of the lately introduced or lately revived sports have been happily vigorous enough for men, yet moderate enough for women, and so the pleasantest of all athletic conditions is realized when both can join to mutual advantage, the refining influence of the one and the manly strength of the other, each exerting a wholesome influence. No one objects to co-education of this kind.

"Out-door Clubs" are the order of the day, and their objects are as excellent as their name is appropriate. No better means of developing the health and strength of the present generation, and with it that of the next, have been devised. Their number and their advantages should be largely increased. We have often wondered why the English game of bowls has not been introduced on some of the beautifully smooth lawns to be seen on every hand.

Those who do not frequent such clubs take to similar games in the park or on their own lawns, and so gain health and happiness, good lungs, good stomachs, and good muscles. Others join "walking clubs," and explore the hidden nooks in the park and discover beauties no carriage can reveal. Nature is a shy beauty that must be wooed and won. Others again have formed the more pretentious clubs for systematic mountain exploration and improvement, such as the Appalachian Club in the White Mountains, and a similar one at the Delaware Water Gap. We are glad to see also that women are asserting their rights to the oar and the quoit, as well as the mallet, the bow and the racket. To foot-ball and fishing, the gloves and the foil,

they will probably remain strangers in spite of what we are taught by a modern artist of the lessons the Roman women learned of the gladiators, and we do not wish to see Amazons in our drawing-rooms.

No class of women need development of the muscular and the respiratory systems more than growing school-girls, and as akin to the subject, we must urge a wider and more thorough introduction of the beautiful and graceful system of calisthenics recently devised and perfected. Not once or twice a week, but every day at least a half hour should be given to such exercise. In time we hope the American woman will not only have legs, but know how to use them; having a back, will be unconscious of it; and in time of emergency be able to swim or to row, to shoot or to climb almost as well as her brother.

#### "ALLOPATH."

"PUTTING away the 'Pathies'" is the title of an editorial in a late number of the *Century*. It fairly represents the misnomer which chiefly the homeopaths have fastened on the regular profession; and the wrong idea which the public have of our position. At the late meeting of the American Medical Association at St. Paul we are glad to see that a protest was entered as to the use of the word "Allopathist." Homeopathy is a "'pathy';" regular medicine is not. "Allopathy" implies the doctrine of "*contraria contrariis*," which we spurn with as much contempt as we spurn that of "*similia similibus*," each being equally false.

We hold to no "exclusive dogma," save that it is our duty to cure disease as quickly and as safely and as happily as possible; no "pathy," save sympathy with the suffering and the injured. We maintain no other position than that of truth scientifically ascertained. We resent any other title than that of "physician."

The profession know no rules by which to administer any remedy but those of experience or induction from physiological and pathological research. If a remedy has been found to be useful in certain given conditions in one man, it will probably be useful in another, and after trial we seek either in the man or the medicine the reasons of its success or failure and act accordingly: if by investigation on man, or the lower animals, it is ascertained that a remedy produces certain effects, we may infer that it will be suited to combat disease when we wish to produce similar effects. Even here experience must be the absolute and final arbiter.

We are the true eclectics. We give any and all remedies, in any and all doses; we are at liberty to use aconite or mercury, hepar sulphuris or quinia; the only proviso is that it be on the avowed basis of experience or research, as already explained, and

not that like cures like, or that the smaller the dose the greater the effect.

The time has come for the whole profession to reject the misnomer so put upon us, and to proclaim its use as an error and a gross offence—all the more offensive because it is erroneous.

#### THE REGISTRATION OF PHYSICIANS.

THE Legislature of Pennsylvania a year ago passed a law requiring all physicians to register their names and residences with the prothonotary of each County, together with the authority under which he or she practices, *i.e.*, a recognized diploma, or evidence of ten years' practice.

Dr. S. B. Hoppin has just issued a little book giving the names, residences, office hours, place and date of graduation of each physician in the County of Philadelphia, and has classified them according to the various schools of practice.

The total number of all kinds is 1548, of whom the University of Pennsylvania leads with 551 graduates, and the Jefferson School with 437. Without diplomas there are 52.

To encourage any of the graduates of last spring who may think this "a good place to settle in," we simply desire him to determine the quotient when he divides the 850,000 of the population by the 1548 physicians to be supported by them, and to ask himself whether he thinks a constituency of 500 apiece, less the larger share absorbed by the favored practitioners, can do it.

But we have referred to the Register for another reason. It will be a convenient way of determining the professional position of every medical man in the County as determined by himself. Irregulars of all sorts who have graduated, it may be, at regular institutions, may be recognized at a glance.

#### ILLEGAL PRACTITIONERS.

WE learn that registration has been refused, in this County, to about 75 persons, all of whom are now *illegal* practitioners. What is the profession going to do about it in all the counties of the State? If nothing be done, wherein lies the good of registration?

Only two ways exist by which these pests are to be banished. It may be left to individual action. Possibly the fine of \$100 in each case, \$50 of which goes to the prosecutor, may be an inducement sufficient to secure their prosecution; or, secondly, the profession as a body, and represented by the various County Medical Societies, may prosecute them. We urge most earnestly that they shall do so. They owe it to the public which is being duped and plundered by these vampires contrary to all law and right; they owe it to themselves as

members of a learned and honorable profession to root out from among them such pretenders to science, who disgrace the profession and every one in it. The expense, which has always to be considered, would be but trifling when compared with the good done to the community, and the fines would recoup the Societies to some extent. The prosecution of a dozen such illegal practitioners in this city would put the other three score to flight, lest they too come to grief. Action should be speedy and rigorous.

#### THE TRICYCLE.

THE doctor's "gig," or "chair," or "one-hoss shay," it seems, may go to the wall. These homely and inexpensive means of locomotion are in danger of being thrust aside by the tricycle, according to *Chambers' Journal*. When in London, last summer, we were struck by the ease and speed with which many persons passed on their way, evidently not for pleasure, but on business, on this to us rather novel vehicle. Even at night, the protecting red light made their use perfectly feasible. Doctors and postmen seem to have taken very heartily to their use, and in many parts of England, in which railway facilities are very limited, they have supplanted the horse to a large extent. The traveller, with ample baggage, can make six to ten miles an hour, without undue fatigue, over the splendid English roads; and the "sociable" form carries two—as may be seen in *Punch*.

But a late improvement really makes the tricycle a possibility. One of the first uses M. Faure made of the storage battery was to propel such a machine at ten miles an hour. With improvements sure to come, we see no reason why the electric tricycle should not become a favorite means of travel, at least, where streets and roads are good. Would that we could say that we saw as good reason to hope for an equal improvement in the highways.

MAYOR KING, of Philadelphia, has shown that the lives and comfort and money of a community can be considered on the "glorious Fourth" as well as on other days.

For two years now we have been spared fire upon fire; the sick and the well have had relief from the pestiferous fire-cracker; and life and limb have been spared. The toy-pistol has had no victims, and the accident- and death-roll at the Pennsylvania and other hospitals have shown no dreadful list of casualties such as we have been accustomed to for years.

Patriotism can and must find other means of expression than the maiming and death-dealing modes hitherto in use. We commend the example to other cities.

## SOCIETY PROCEEDINGS.

### THE MAINE MEDICAL ASSOCIATION.

*Thirtyith Annual Meeting, held at Portland, June 13, 14, and 15, 1882.*

(Specially reported for THE MEDICAL NEWS.)

TUESDAY, JUNE 13TH.—The Thirtieth Annual Session of the Maine Medical Association opened in the Council Chamber, city building, at Portland, at 10.30 o'clock A.M., the PRESIDENT, DR. A. K. P. MESERVE, of Portland, in the chair.

The morning session of the first day, after prayer by Rev. J. P. Warren, of Portland, was devoted to the transaction of

#### MISCELLANEOUS BUSINESS,

the appointment of various committees, hearing the reports of the Treasurer, the Visitors to the Medical School of Maine, and the Portland School for Medical Instruction.

The *Report of the Treasurer*, Dr. A. S. Thayer, of Portland, showed the financial affairs of the Association to be in every way prosperous.

From the committees appointed to visit the "Medical School of Maine" and the "Portland School for Medical Instruction," the reports were highly satisfactory, and testified to the thorough manner in which the duties assigned had been performed.

The curriculum, methods of study and instruction, and the results of the labor of instructors and students, as evinced by recitations, and the final examinations for degrees, were carefully and fairly criticised. Special praise was accorded the instructors in both these schools for their efforts in the direction of a higher standard, by preliminary entrance examinations, longer terms, and a scale of high marks.

The AFTERNOON SESSION opened at 3 o'clock, DR. B. F. STURGIS, of Auburn, in the chair.

In accordance with a resolution of the Society, adopted in 1878, the retiring President, Dr. Meserve, then read

#### THE ANNUAL ADDRESS.

After a few introductory remarks, the speaker alluded to the sad death of his predecessor, Prof. Wm. Warren Greene.

The Association was then congratulated that its members had labored so earnestly and successfully to keep pace with advancing medical science, and attention called to the practical benefits which had resulted from a strict enforcement of the rule to allow questions of ethics and personal relations to be taken from the Board of Censors, and discussed only by a *unanimous vote*.

It is often difficult—almost impossible, in view of the vast bulk of medical literature, and the countless aids to professional and scientific advancement—to solve the problem of how to best select and appropriate those of the most advantage. Each must determine for himself, but by careful inquiry, by the notices and reviews in the medical journals, by a full and free interchange of opinions, the solution may in part be found.

It was urged that the members strive to contribute matters of interest to the general practitioner and avoid too great a tendency to devote more than a fair amount of time to those specialties having interest only for the few.

There is also too great a danger, especially noticeable among writers, of ignoring or but slightly noticing the treatment of disease. This is doubtless occasioned in part by the enormous strides which have been made in biological investigations, and the special branches

of normal and pathological histology, but how few, comparatively, are they who to-day are conscientiously and in true scientific spirit investigating the action of medicines upon the human economy! This is an important field, in which great and successful labor yet remains to be wrought. "Let us give due prominence to the art of medicine."

So little success had attended previous efforts to secure legislation favorable to the elevation of medical practice, or the enactment of needed sanitary laws, that further recommendations seemed useless; but in 1881 a law was passed regulating the practice of attorneys, and bills of interest to the medical profession may perhaps in future meet with less opposition. In truth, the demand for laws of registration, or for otherwise preventing irregular practice, must come from the people whom it was the duty of our profession to so enlighten that they might understand the difference between an educated physician and an empiric. They should clearly understand the definition and true bearing of the term "*regular physician*," and know that we entirely disclaim any such title as "allopath," or any designation whatever.

Expert testimony should only be given at the request of the Court, or the Court itself should be arbitrator. Legislation in this direction is imperative, as preserving the good name of the profession, and to this end the Association ought diligently to labor. As a State Board of Health is yet a thing of futurity, the Association must find what consolation it may in the passage of the anatomical bill enacted in 1881, until the preservation of health and life may seem at least of equal importance with the aspirations of politicians.

To the efforts of the Association has been due in no small degree the past elevation of the medical profession of Maine to a higher standard of usefulness and to a nearer approach to the ideal physician, whose presence always brings comfort and inspires confidence among the unfortunate and afflicted.

After a vote of thanks to Dr. Meserve for his able and instructive address, DR. W. K. OAKES, of Auburn, read a paper on

#### THE ADMINISTRATION OF ETHER.

In the consideration of this subject, he presented three divisions:

- 1st. What class of cases are suitable for its use?
- 2d. What inhaler is the best for general use?
- 3d. What rules or methods are to be observed in the course of its administration?

In answer to the first, he stated that, except in cases of extensive valvular lesions, or advanced stage of phthisis, he had never felt obliged to deny a patient the benefit of ether, and even then thought the risk from ether much less than the probable shock.

Second. The inhaler, which in his hands seemed best to meet all requirements, was a cone rolled up from alternate layers of towel and thick paper, and provided with a wad of cotton; it was inexpensive, saved ether, and was easily constructed. He had also used the thin folded towel covered by dry ones if necessary, but found it inferior to the method mentioned.

Third. The doctor would urge more uniformity in the manner of administration; considered it unfortunate that no more explicit and definite instruction was given students on this subject.

Complete anaesthesia is by no means devoid of danger, and calls for the greatest skill and caution on the part of the administrator, who should devote his whole attention to this and this only. The room should be perfectly quiet; the patient should be impressed with the necessity of taking full and deep inspirations, and of keeping in mind all the time the last instruction to "keep perfectly quiet;" and, having loosened the cloth-

ing about the waist and throat, the saturated cone should be gradually approximated to the face, allowing a free admixture of fresh air, until the anæsthetic begins to manifest its effects.

The choking or coughing stage may be obviated by a breath of fresh air, and the tendency to swallow the tongue, by keeping the head bent well back. As little force should be used as possible.

His attempts at prevention of vomiting had been attended with little success. Had failed with bromides—hypodermics of morphia—and often after having prohibited solid food for several hours previous.

In all cases demanding severe operations, the anæsthesia should be complete before beginning. Some minor operations, such as extraction of teeth, and incision of felon, might be made at the moment of the first impression. He thought the danger from shock producing heart failure very slight with ether in such small operations, as compared with chloroform. More dependence is to be placed upon the respiratory movements, than the force and frequency of the pulse, as indicating the condition of the patient. If cyanosis threatens, and a few whiffs of fresh air do not revive the patient, Sylvester's method of artificial respiration should be at once employed.

A detailed record of thirty-one fatal cases from ether, unmixed with any other anæsthetic, shows that eleven died within fifteen minutes after the commencement of the operation, when but a small amount of ether had been taken. Five of them died in from an hour and a half to forty hours after completion of the operation. Fifteen were under forty years of age, and sixteen over forty. The youngest was fourteen, and the oldest over eighty.

No record of deaths in dentists' chairs was reported. He believed that at such times a physician should always administer the ether.

In concluding, he said he hoped the discussion might bring out the experience and practice of others in administration, management of accidents, prevention of nausea or vomiting, and the use of agents other than ether.

DR. HUNT recommended, as a preventive of vomiting, the administration of a full dose of some alcoholic one hour before giving the ether.

DR. GORDON preferred to give the ether on an old towel, folded, allowing a free admixture of air. By this method, he claimed that the administration was easier, and more rapid. He very rarely spent more than five minutes in etherizing any patient; oftener consumed from three to four minutes, and an ounce or two of ether.

DR. GERRISH preferred the towel to the cone, though it was wasteful of ether. He had not had any success in quick administration, but averaged from ten to fifteen minutes. He thought the administration of from seventy to eighty grains of bromide of sodium, during the twenty-four hours previous to operation, had in his hands been successful in preventing emesis.

DR. O'BRION said the exigencies of ether could not always be guarded against in a busy country practice. As a preventive of waste, he would cover the ether towel with one wet in water. Believed emesis to be oftener produced by paralysis of the pneumogastric than by a full stomach.

DR. CROOKER relies much upon carbolic acid.

DR. A. J. FULLER, of Bath, reported

#### A CASE OF UNUSUAL ACCUMULATION OF ASCITIC FLUID.

The patient, a married lady, sixty-five years of age, was tapped, in all, forty-three times. The first operation relieved her of twenty-two and a half quarts of clear serum; the last operation was on February 12, 1882, one year and nine months from the first tapping,

during which time seven hundred and ten quarts of fluid were removed. The patient died two weeks from the date of the last operation.

#### REPORTS.

DR. SANBORN, of Augusta, read his report as delegate to the Connecticut Medical Society; and DR. E. EUGENE HOLT, of Portland, read a brief account of his visit to the Seventh International Medical Congress last August.

#### CONGENITAL MALFORMATIONS.

Among the voluntary reports of interesting cases was one by DR. O'BRION, of Bristol. A female child was born, after an easy labor, with what appeared to be an intra-uterine amputation of the left forearm. Close examination revealed an otherwise perfectly formed child. But the deformity proved to be not an amputation, but the substitution of a well-formed ankle and foot for a forearm. This was of normal size, situated at what should have been the elbow-joint, presenting its plantar surface forward. The child is now six years of age, and perfectly healthy. The supplementary foot has increased not quite in proportion to the other members, but is destitute of any bony structure; in other respects it is a perfectly formed foot.

DR. ADAMS, of Litchfield, reported a case of a child born with fractures of all the long bones, attributed to an accident during the third month of pregnancy.

The EVENING SESSION opened at 8 o'clock with a paper by DR. E. EUGENE HOLT, of Portland, on

#### SYMPATHETIC DISEASES OF THE LACHRYMAL APPARATUS.

After a brief review of the anatomy and physiology of the lachrymal region, the author passed directly to speak of epiphora, regarding it as dependent upon, (1) affections of the lachrymal gland itself; (2) granulations or foreign bodies on the lid or in the retro-tarsal fold; (3) displacement, obstruction, or obliteration of the semilunar fold and caruncles; (4) stricture of, or foreign body in, the canaliculus; (5) Inflammation of the lachrymal sac; (6) stricture of the nasal duct; (7) naso-pharyngeal catarrh, polypus or foreign body in nasal cavity, granulations or adenoid growths in the vault of the pharynx; (8) ametropia; (9) paresis or paralysis of the facial nerve; (10) mental influences.

Statistics were presented compiled from fifty-one cases of lachrymal disease, illustrating the operation of these different causes. When the epiphora had resulted from ametropia, the excessive lachrymation had been greatly or entirely relieved by the application of glasses to correct the optical defect.

Conservative treatment had been adopted in the writer's first series of cases of lachrymal disease, and radical treatment in the second; his preference was decided in favor of the milder measures.

Lachrymal abscess was often mistaken by the general practitioner for erysipelas. If seen early, the trouble might be averted by hot water, hot fomentations, leeching, or steaming; if not, then recourse should be at once had to the knife, when an opening might be made through the canaliculus, or by Agnew's method, entering the sac by a Beer's cataract knife, through the mucous membrane at the angle behind the canaliculus just in front of the caruncle; the sac should be opened through the skin only as a last resort.

It was stated that the milder treatment of this distressing affection was strongly urged by Fitzgerald and Swazey, of Dublin, as well as by Power and Bozman, of London, and many Continental ophthalmologists.

In the discussion following, DR. SPAULDING thought that the prognosis in cases of diseases of the lachrymal

apparatus depended largely upon the locality of the obstruction. If the latter were situated in the puncta, 'canalliculi, or even at the entrance to the sac, a favorable result could be almost surely relied upon. But when the obstruction, stricture, or inflammation was deep seated in the sac itself or in the nasal duct, the affection was liable to be very obstinate. (This point was elucidated by various cases reported.)

In slitting open the canalliculi we should be careful not to make the incision outward, but inward, so as to form a reservoir for the tears. Large probes were occasionally beneficial, but their long-continued use might cause extensive inflammation in the neighboring tissues.

In blenorhoea of the sac, local applications (by means of the syringe) of boracic acid and different astringents were always indicated.

It is bad surgery to apply poultices over an inflamed lachrymal sac. Two cases of lachrymal fistula dependent upon this treatment were reported; under all such circumstances the surgeon should insist upon the knife, for he could then open where he chose and make a smooth incision, which could be kept clean and thoroughly drained.

DR. STANLEY P. WARREN, of Portland, presented a practical paper on

"TREATMENT OF THE PLACENTA AFTER ABORTION." The writer classified abortions under four heads, advocating primary extraction of the placenta without leaving the result to nature, observing, of course, all proper precautions with reference to shock and hemorrhage.

*Class I.*—Sudden flooding, cervix open, severe shock, and it is unknown whether the placenta has been expelled or not.

*Class II.*—Moderate hemorrhage; the fetus has recently been expelled; the cervix open, and the placenta within reach; general condition good.

*Class III.*—The fetus has been expelled for some days; the secundines are retained; the lochiaæ are fetid and some form of septic inflammation is present in the pelvic cavity.

*Class IV.*—There has been more or less flooding; fetus has been expelled; cervix is closed, and the placenta cannot be reached by the finger; general condition good.

Cases were cited illustrating each of these divisions, and facts presented as to the subsequent condition and labors of these patients.

For the first class the Doctor recommended procedures which should relieve shock and check hemorrhage, and as soon as reaction was well established the contents of the uterus, if any, should be removed.

In the second class there appears to be no question as to the propriety of immediately evacuating the uterus if the placenta is free and can be removed *without preliminary dilation of the cervix*. It is to be regarded as simply a foreign body. There is less danger of injury to the tissues with the finger than with the curette; it has also the advantage of the sense of touch. The curette, on the other hand, causes less pain and may be used with or without the speculum; has not found the ovum forceps as safe as the curette, still less than the finger, and ought to be used very cautiously in the uterine cavity.

In the third class, where we have present or impending some metritis, no good reason obtains why the uterus should not be, within 24 hours, relieved of its contents and thoroughly cleaned; the cervix is usually patent and requires no dilation; a dull curette, followed by intra-uterine, not carbolized, injections, will accomplish every desired object in the way of removal. The quicker the focus of infection is taken away, the less is reparative action delayed and septicæmia to be expected.

In dealing with class third, when the foetus is expelled, but the placenta shut up in the uterine cavity, obstetricians must choose whether they will "do nothing," relying upon rest and opiates, or mechanically dilate the cervix, perhaps, with a sponge tent, and, as they say, "let nature take its course," or they *may remove* the placenta within twenty-four hours after the expulsion of the embryo, using dilators for some hours before operating, or dilating with finger, and immediately extracting.

On these points of procedure the most distinguished obstetricians and gynecologists in the country differ.

It has been urged in objection—

1. It is unnecessary, since the vast majority of patients do well if let alone.

2. It is the finger, curette, or forceps that does the damage, rather than the retained placenta.

3. It is very difficult, perhaps impossible, to entirely remove an adherent placenta, and septicæmia can be caused by a placental tuft as surely as by the entire organ.

To these objections the Doctor replied:

1. Tonic contractions are essential to the arrest of hemorrhage; there cannot be tonic contractions until the placenta is expelled, and the less will be the hemorrhage existing or possible.

2. Anxiety in both patient and physician will be prevented by early completion of the abortion.

3. Time is gained in uterine involution.

4. Absorption of putrefaction from retained secundines is unquestionably the most frequent sequel in abortion; when the uterus is thoroughly disinfected, septicæmia is evidently imaginary. Possible accidents from manipulation are not a sufficient reason for permitting a placenta to be removed by decomposition, ignoring the fact that self-imprisonment must be imminent; by early removal, therefore, of the placenta, septicæmia is prevented.

5. Clinically, after abortion, metritis can rarely be traced to direct mechanical violence. If lesions have occurred in the process of extraction, infection in an empty uterus must be slight when compared with one in which the entire absorbing surface is exposed, and covered by a decomposing placenta.

Inasmuch as the session had already been prolonged to a late hour, beyond the usual time for adjournment, this paper did not receive as much discussion as so interesting a subject, and more particularly the merit of the paper itself, deserved.

#### WEDNESDAY, JUNE 14.

The Association met at 9 A.M., and unanimously adopted the resolution condemning

#### THE NEW YORK CODE

offered by DR. S. H. WEEKS, of Portland (see THE MEDICAL NEWS, June 24, p. 703).

DR. M. W. HALL, of Saco, read a paper on

#### RUBEOLA,

illustrated by facts and statistics from his own practice and that of other members.

DR. E. C. HILL, of Lewiston, presented

#### A CASE OF SEXUAL MALFORMATION

for inspection. The patient, a well-developed child of four years, had presented this abnormality from birth. The clitoris was apparently a penis, though imperfect; the meatus urinarius was situated some distance within the ostium vaginæ, which had been enlarged to admit of a free passage of urine and exploratory examination. The uterus was normal. Subsequently the clitoris was amputated in the presence of several members of the Association.

## RESIGNATION OF THE SECRETARY.

DR. CHARLES O. HUNT, Superintendent of the Maine General Hospital, tendered his resignation as Recording Secretary, after fourteen years of continuous service.

In accepting this resignation the Association adopted the following resolution:

*Resolved*, That in accepting the resignation of Dr. Charles O. Hunt as Secretary of the Maine Medical Association, we tender to him our sincere thanks for the able and efficient manner in which he has performed the duties of the office, and regret exceedingly that he feels obliged to resign his position on account of pressure of other business engagements.

Drs. C. W. Johnson, of Machias; Dr. Decker, of Fort Fairfield; and Dr. George W. Stoner, of the U. S. Marine Hospital Service, were introduced to the Association and invited to participate in the discussions.

DR. JAS. A. SPALDING, of Portland, read a paper on

## THE EXTRACTION OF CATARACT,

showing by diagrams the various methods of making the incision, of performing the iridectomy, of opening the capsule, and of removing the cataractous lens from the eye.

Several cases were referred to, in his own practice, showing how the operation might miscarry from no fault of the operator. "We are apt to forget that an eye affected by cataract is no longer young, no longer healthy; on the other hand we should be ready to avail ourselves of the result of experience and practical study, in order to save an eye which might have undergone inflammation after a perfect extraction of the cataract."

Great stress was laid upon the careful performance of every step in the operation, as well as upon the necessity of absolute rest subsequently.

The author then mentioned the excellent results which he had lately obtained in several cases in private practice, as well as at the Maine General Hospital, but did not offer any statistics, his figures being at present too small to compare with the larger ones of more widely known ophthalmologists.

## MISCELLANEOUS BUSINESS.

The PRESIDENT appointed a committee to revise the by-laws, and report next year.

DR. SANGER's report on proposed changes in the constitution was accepted, and lies over for action until the meeting of 1883.

DRS. PIERCE, of Freeport, and THAYER, of Portland, reported cases in which a large amount of pleuritic effusion was eliminated by expectoration.

AFTERNOON SESSION.—The Association came together at three o'clock, and resumed its work by welcoming delegates from other Societies.

From the Massachusetts Society were present Drs. Dwight, of Amherst, and White, of Somerville.

Dr. Gibson, of New Hampshire, was introduced as a delegate from the White Mountain Medical Society.

The Association then proceeded to

## THE ELECTION OF OFFICERS.

DR. GEO. E. BRICKETT, of Augusta, was elected President.

The Nominating Committee reported the following list of officers and appointments. The report was accepted and those gentlemen declared elected.

*Vice-Presidents*.—Drs. J. B. Walker, of Thomaston, and E. A. Thompson, of Dover.

*Recording Secretary*.—Dr. Chas. D. Smith, of Portland.

*Corresponding Secretary*.—Dr. J. O. Webster, of Augusta.

*Board of Censors*.—Drs. H. N. Small, of Portland; W. K. Oakes, of Auburn; J. M. Bates, of Yarmouth; Wm. B. Cobb, of Standish; and J. D. Nutting, of Hallowell.

DR. BRICKETT, the newly elected President, read a paper entitled

## TEN CASES OF AMPUTATION OF THE THIGH.

These operations were made to relieve diseases of the knee-joints, and after gunshot wounds and other injuries.

Two were made with use of "Listerism," and the remaining cases were treated in the old way with silk ligatures and cotton dressing. Recovery was secured in every case.

In his conclusions, the Doctor argued strongly:

1. That there is no need of the carbolic acid spray in amputations.
2. That all hemorrhage should be completely arrested before dressing.
3. That all bleeding vessels should be tied with either *silk* or *catgut*, and *cut short*.
4. That flaps should be united by the same material, and covered by dry absorbent cotton, or Lister's antiseptic gauze.

5. That drainage is not necessary if the surfaces are *perfectly dry* before approximation.

No drainage was established in any of the cases reported.

And lastly, that operating immediately after injuries, or before reaction follows shock, may sometimes be advisable.

DR. ST. C. O'BRION, of Bristol, then delivered the

## ANNUAL ORATION,

entitled *The Young Physician*.

DR. BYER, of the U. S. Navy, was introduced and invited to participate in the discussions.

DR. L. J. CROOKER, of Portland, exhibited an ingenious instrument to be used as an *exploring or evacuating trocar*.

At the EVENING SESSION DR. F. H. GERRISH, of Portland, reported the results in

TWO CASES OF REMOVAL OF UTERUS AND OVARIES, the only cases of the kind which he had had, and, as far as he had learned, the only successful cases in the State.

The details of the operations and after-treatment were not given, having been previously reported to the County Society, but the essential facts were stated. The operations were performed to relieve patients of uterine fibroids, and consisted in each case in the removal of the body of the womb, the cervix being tied with silk just above the vaginal junction.

In the first case there was no shock, no hemorrhage, no peritonitis, no septicæmia, the patient slowly regaining her strength, and going to work in a farm house thirteen weeks after the operation. For more than ten months she has done all the woman's work on a small farm, and is in the enjoyment of good health. The remnant of the cervix is felt as a very small projection into the vagina, and there is not the smallest evidence of the existence of any inflammatory products anywhere in the pelvis.

In the second case septicæmia appeared at the end of a week, and nearly destroyed the patient. There was profuse hemorrhage from the vagina at the time when menstruation would have been expected, but for the operation, and at the six subsequent periods there has been some profound perturbation of the system, sometimes a high fever, at others a violent hysterical attack, etc., as if nature, being deprived of the organ through which it had ordinarily expressed itself, sought new channels in quite different directions. The cervix

has dwindled, but all around the vault of the vagina is a thick mass of plastic material, exquisitely sensitive, and evidently the result of inflammation.

The patient is still an invalid, but apparently has a good chance of recovery in time. In both cases the ligatures escaped through the vagina.

DR. HOTT read a paper entitled

#### THREE MONTHS AT THE ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS,

embodying a description of the institution. The paper set forth some of the methods of operation there in vogue. It spoke of the treatment of ophthalmia neonatorum, so faithfully carried out by Dr. L. Webster Fox, then acting assistant house-surgeon, now of Philadelphia; of Buller's eye-shield for the protection of the sound eye in gonorrhœal ophthalmia; of the treatment of diphtheritic ophthalmia by the constant local application of a solution of quinia (Mr. Tweedy); of the use of eserine, and the different views as to the treatment of sympathetic inflammation; of tobacco amblyopia, and many of the rarer forms of ophthalmic disease.

In the ensuing discussion DR. SPALDING thought that the methods here employed did not differ essentially from those which the text-books laid down. Too much weight has been laid on diphtheritic conjunctivitis, which in our country, outside of the large cities, is so rare that it is doubtful if a genuine case has ever occurred, for instance, in Portland.

Eserine had proved itself dangerous in one or two cases of keratitis, setting up severe iritis. We should always remember that iritis is by no means uncommon in inflammation of the cornea; hence eserine should be used sparingly in the latter disease. Still it is a most valuable remedy; only the physician should generally be entrusted with its application to the eye.

Dr. Spalding could not agree with the views expressed concerning the doubt which had been mentioned as prevailing in cases of threatened or evident sympathetic ophthalmia.

The indications and counter-indications for enucleation had been so carefully laid down in Mauthner's "Sympathetic Diseases of the Eye," that every one should be able to decide upon the proper steps to be taken. Optico-ciliary neurotomy was not considered entirely satisfactory as a prophylactic against the transmission of this terrible affection.

THURSDAY, JUNE 15TH.—DR. J. O. WEBSTER, as delegate to the Massachusetts Medical Society, presented his report.

DR. CHADWICK read a touching eulogy on the late Dr. S. H. Tewskbury.

#### THE BOARD OF CENSORS

reported at some length, making the following appointments for the next meeting:

*Orator.*—DR. M. C. WEDGEWOOD, of Lewiston.

*Necrologist.*—DR. S. C. Gordon, of Portland.

Also Visitors to the "Medical School of Maine," and the "Portland School for Medical Instruction." The number of subjects assigned for the next meeting is larger than heretofore, and it is hoped the session of 1883 will meet all expectations.

*The Report of the Committee on Necrology* was received and referred.

DR. GERRISH reported a case of

#### URETHRAL DIVERTICULA IN THE FEMALE.

He was obliged to catheterize a patient after a difficult parturition and had great trouble in doing so, on account of spasms, as he at first supposed. After prolonged and fruitless efforts, he etherized the patient but succeeded no better; he then called a skilful and experienced practitioner in consultation, who tried for

a half hour to introduce the catheter, but in vain. Subsequently Dr. Gerrish discovered that the urethra made a sharp turn forwards, and that there was a diverticulum from each side, one two inches, and the other one inch in length.

After this there was no difficulty in drawing the urine or in entering the diverticula at will. They were not false passages, as the woman had never before had a catheter passed on her.

After the usual votes of thanks to retiring officers, and the city of Portland for use of the rooms, the meeting adjourned to meet at Portland on the second Tuesday of June, 1883.

#### NEW YORK SURGICAL SOCIETY.

*Stated Meeting, April 11, 1882.*

DR. T. M. MARKOE, PRESIDENT, IN THE CHAIR.

DR. H. D. NOYES, on invitation, read a paper entitled *A Case of Lodgement of Foreign Body in the Cavities of the Nose, Orbit, and Cranium, where it remained Five Months; Removal by Operation; Subsequent Trephining for Pus in the Brain; Death; Autopsy;* which is published in full in the current number of *The American Journal of the Medical Sciences*, page 45.

DR. POST recalled one of Mackenzie's cases where the patient was able to walk several miles to a surgeon, and after the wound was dressed and recovery had so far advanced that he was quite well, he indulged in drinking, and a fatal inflammation developed as the result of the debauch. The foreign body was extracted during the progress of the fatal inflammation.

DR. R. F. WEIR remarked, concerning the literature of the subject, that the best account he had found of foreign bodies in the brain was in a prize essay by Dr. Wharton, of Philadelphia, who collected 316 cases, and in 14 of these the foreign body was a breech-pin. Of these 14, 9 appeared to bear out Dr. Noyes' remark fully, that when removed early the patient usually did well, for in every instance the foreign body was removed within three days and in some of them within a few hours after the reception of the injury, and recovery followed in 7 cases. Of the remaining 5 cases of the 14, the breech-pin in one remained 24 days, was not extracted, the wound in the brain healing perfectly, but the man died. In another it remained 28 days, was not extracted, and the man died in consequence of inflammation set up by excessive drinking. In another case reported by O'Callaghan in 1845, the breech-pin remained in the brain one year, and then the patient died from inflammation resulting from intemperance. In another case the foreign body remained 26 days, was three inches long, was extracted, and the patient recovered. In another case the foreign body remained 4 months, weighed two ounces, was extracted, and the patient recovered.

An important point raised by Dr. Noyes was, whether or not surgeons should refrain from interference in these cases. In looking over the list of cases referred to, he was struck by the fact that, sooner or later, where the body was not fixed or immovable, death occurred in consequence of inflammatory action from undue exercise, sudden jars, excessive drinking, etc. It would seem that this class of patients are exposed to danger all the time. This also obtained, though to a lesser degree, in those where the foreign body was imbedded or held firmly *in situ*. He felt that the risk in a given number of cases would be less from interference, and that the surgeon would be justified in extracting the foreign body whenever met with, observing great precaution to free it carefully and thoroughly from all bony hindrance, so as to permit the extraction to be accomplished easily and without force, and in this way

to disturb the cerebral end of the missile in the least possible degree. In other words, it should be lifted out, not pulled out.

The accounts presented of the successful removal by Beaumont of a piece of a rocket shaft; by Jamison of a piece of wood embedded four months; by Larrey of the point of a javelin fourteen years in the brain; by Mactier of the blade of a penknife, two inches long, six months *in situ*; and by Turnipseed of a similar foreign body lodged three years, with others equally forcible, encourage surgical opinion and action in this direction.

DR. STIMSON asked if the cavity in the anterior lobe on the right side in the specimen represented the cavity of the abscess evacuated at the time of the operation of trephining.

DR. NOYES said that it did not. The abscess struck at the time of using the trephine was formed about the cyst which enclosed the foreign body. But, from the trephining operation to the time of death, there was a continuous breaking down of brain substance, extending backward towards the middle lobe.

DR. GEO. A. PETERS said that, since the New York Hospital had occupied the present building, there had been a case in its wards similar, in some respects, to the one reported by Dr. Noyes. As he recollects, a man was shooting duck in Jersey; his gun exploded; and the breech-pin was driven into his forehead. It was extracted, and he recovered. Some years ago an explosion of nitro-glycerine occurred in Greenwich Street, and, two blocks above, a milkman was thrown from his wagon, and received injuries, for which he was brought to the hospital, where Dr. Peters saw him two or three hours afterwards, and found that a large fragment of the wagon had been driven through the parietal bone, and an inch or more into the substance of the brain. He was unable to move it; but, by gnawing the bone away with a rongeur, he succeeded in removing it, and the patient recovered.

THE PRESIDENT thought that the line of practice in recent cases would be regarded as settled in favor of immediate removal of the foreign body. It seemed to him, however, that Dr. Noyes had suggested an important point upon which the cases cited by Dr. Weir, more carefully analyzed, might throw some light, namely, as to whether it is the duty of the surgeon in cases in which the foreign body has been in the brain for a considerable period without producing any symptoms, to remove the body under the apprehension that certain accidents might occur in the future, or whether it should be left, in the hope that these accidents might not occur or be long delayed.

DR. PETERS said that he should be loth to leave a foreign body in position for much time after he had discovered its existence, believing that the damage which it might occasion by being there, more than counterbalances the risk which might be incurred by any reasonable effort at removal.

DR. WEIR thought that the case reported by Eve, in his "Remarkable Cases in Surgery," supported Dr. Peters' views. In that case the breech-pin entered the ethmoid and sphenoid bones, but the cranium was not involved. It was carried, with much suffering and nasal discharge, by the patient for eight years, when one day attempting to sit upon a chair the patient sat through error forcibly upon the floor. The result was that the breech-pin broke, from the impulse, from its attachments, invaded the cranial cavity, determined a cerebral abscess, and caused death on the eighth day afterwards. In other words, he thought in recapitulation that the risks of leaving the foreign body were greater than those which came from an operation for its removal.

DR. STIMSON thought it desirable, if possible, to as-

certain what the effect of the practice was in this case. From where did the pus come at the time of the first operation?

DR. NOYES said that the first operation was simply enlarging the opening in the orbital plate, two weeks after removal of the foreign body. The pus was found just above the orbital plate, and was evacuated by an incision which enlarged the aperture in the dura-mater made by the foreign body; and it was quite probable that the abscess extended back into the brain substance, beyond the cyst. He thought that disintegration was going on about the cyst at that time. During the two weeks there had been discharge of purulent material that was very offensive, and it was assumed, and the light of subsequent experience seemed to show that the assumption was correct, that it came from within the cranium. Before the foreign body was removed, there was only a slight ichorous discharge from the nostril. It was quite probable that the cavity of the abscess might have been reached from the orbital side had he proceeded a little further with the exploration. To attack the abscess through the orbital plate was attended by serious inconvenience for two reasons: 1. The drainage secured is bad. The head lying upon a pillow, the discharge does not easily find a way of escape. The trephine hole is more direct than the opening in the orbital plate. 2. The growth of reparative tissue in the orbit constituted an obstacle to free drainage, and was also a constant source of embarrassment in the dressings. Dr. Noyes thought that one of two suggestions, or, perhaps, a combination of both, would be advantageous in similar cases. First, it was suggested by Dr. Weir that perhaps it would be proper to try and reach the abscess by removing the orbital edge of the frontal bone with a chisel or other means, and make an opening into the frontal lobe directly at the edge of the brow. The same suggestion has already been made by Berlin.

A second suggestion is that the best evacuation of the abscess can possibly be secured by entire evisceration of the contents of the orbit, because the surgeon in that way gets rid of a large mass of material that obstructs drainage and dressing.

DR. STIMSON thought that the existence of an inch and a quarter of solid brain tissue between the surface and the abscess at the time of the introduction of the drainage-tube, and the entire absence of that tissue at the end of 24 days was rather against the desirability of using a drainage-tube under such circumstances. He thought that an abscess situated at that distance below the surface should be reached through the original orbital opening rather than from above, notwithstanding the greater dependence of the opening made with the trephine.

DR. NOYES remarked that the drainage-tube was kept in place for only three days, and was introduced in accordance with a suggestion made by Dr. Lidell in the American edition of Holmes' "System of Surgery," in his notes to Prescott Hewett's article, as to the propriety of using a drainage-tube.

DR. LIDELL referred to the propriety of using a drainage-tube, as suggested in the American edition of "Holmes' System of Surgery," in his notes to Prescott Hewett's article. Another interesting question was with reference to the point at which the trephine should be applied, and, as already stated, it was chosen in accordance with the suggestion made by Dr. Janeway.

DR. JANEWAY said that the reasons that led him to select the point at which the trephine was applied were, (1) because the direction in which the missile entered, and the course of the track from which it had been removed, pointed towards its lodgement in the anterior lobe; (2) the fact of its having been in the anterior lobe during five months and yet producing no paraly-

sis, indicated that it had rested in a part of the frontal lobe anterior to the motor tract; and (3) the strong probabilities were that an abscess formation would have its centre at the point where the foreign body had laid, and where in its removal a certain amount of injury had been inflicted upon the brain substance. A paralysis coming on after removal did not absolutely indicate abscess extending back to the motor tract, but it might be due to secondary inflammatory oedema spreading beyond an abscess.

He thought that the paralysis in this case was probably due to a secondary oedema rather than an abscess itself, because he had seen several cases in which paralysis had, without doubt, been produced in that way, because the original tumor, abscess, or injury, had been anterior to that portion of the brain the injury of which gives rise to paralysis.

Besides, if the trephining had been done over the motor tract and drainage was to be effected through the opening, the destruction of brain tissue in the motor tract, which would almost inevitably have followed, would have given rise to permanent hemiplegia.

The edematous infiltration of the surrounding parts, secondary to an abscess, tumor, or foreign body, should always be kept in mind in estimating the probable cause of paralysis.

Another point of interest, surgical as well as medical, though belonging to a different class of cases, was the liability to the occurrence of abscess of the brain, etc., after the removal of a portion of the periosteum of the skull, and also after rhinoplastic and other operations of a similar character about the head. He had seen one case of rhinoplastic operation followed by abscess of the brain, and another followed by meningitis.

DR. KNAPP thought that Dr. Noyes' suggestion concerning complete removal of the contents of the orbit, could be readily carried into effect without special danger. With reference to tumors in the frontal part of the skull, they were very apt to prove fatal by meningitis.

DR. ALLAN McLANE HAMILTON said that when he saw the patient it was some time after the paralysis had manifested itself, and there was involvement of the motor tracts and certain parts of the tegumentum. He was, however, struck by one thing, the comparative absence of psychic symptoms. Ferrier, Lepine, Baraduc, and others, have presented cases in which decided mental impairment followed injury of the frontal lobes. There was a condition which was symptomatized by a noticeable diminution of intelligence and concentration.

Ferrier's experiment upon monkeys were negative so far as paralysis was concerned, but a marked change was produced in the animal's disposition.

He remembered a case some years ago with extensive destruction of the frontal bone and hernia cerebri in a boy twelve years of age. Large masses of the brain substance were cut off, but there was no affection of intelligence. These two cases are exceptions (but rare ones) to Ferrier's law. According to Meynert, Wundt, and others, the anterior brain is what may be called the seat of inhibitory mental power, and extensive destruction shows this usually.

DR. JANEWAY said that, whilst Dr. Noyes' patient would answer questions, and his intellect seemed, upon general observation, to be unimpaired, it was very questionable whether, if placed in his boyhood surroundings, and among his relatives and companions, he would have exhibited his usual mental power. Patients under similar circumstances might answer simple questions and do simple things when called upon; but questions which required a little more thought they were very frequently unable to answer, and then it was that mental impairment was manifested.

He had had a case in which there was greater primary destruction of the substance of one frontal lobe

than in the case reported by Dr. Noyes, and yet the man was able to do ordinary kinds of work, and died of multiple embolism of the right anterior, middle, and posterior cerebral arteries, from ulcerative endocarditis.

At the autopsy it was found that there had been destruction of the first and second frontal convolutions, back to within an inch of their posterior extremities, over a space two inches in length, extending from the corpus callosum up to the surface, leaving a cyst two inches across, and partly filled with a plexus of convoluted veins.

The Society then adjourned.

#### COLLEGE OF PHYSICIANS OF PHILADELPHIA.

*Stated Meeting, June 7, 1882.*

W. S. W. RUSCHENBERGER, M.D., PRESIDENT, IN THE CHAIR.

DR. WILLIAM B. HOPKINS read a paper on *Tenosynovitis: its Causes, Nature, Symptoms, and Treatment; Based upon an Analysis of Fifteen Cases*, which he defined as an affection usually occurring in the forearm, and characterized by a peculiar creaking of the tendons as they move in their sheaths, depending upon a particular kind of strain to which the muscles belonging to these tendons have been subjected.

The predisposing cause of the affection is the occupation of the individual, and in studying, therefore, fifteen cases, occurring in subjects of otherwise average health, the nature of their employment is worthy of special attention. In three of the fifteen, the disease occurred in men employed in a dyehouse, whose work consisted in wringing the goods, which had been soaked in dye; in two, the patients were weavers, who throw the shuttle from side to side with the index finger of the right hand; one case occurred in a baker, from kneading bread; one in a boiler riveter, from hammering; one in a car-driver, from using the brake; one in an iron-moulder, from continued use of the shovel; one in a plaster-worker, from stirring plaster with a hoe; one in a washerwoman, from using a clothes wringer; one in a laborer, who continued to work after receiving a severe contusion of the forearm from the fall of a heavy iron pipe; and one each in a rope twister, a marble rubber, and a painter.

In contrasting the above-named occupations with many others, requiring far more muscular effort, and giving employment to many more workmen than these, the idea suggests itself that it is not the mere amount of strain to which the muscles and their tendons are put that predisposes to the disease, but rather the kind of effort which is of a tedious, continuous, monotonous sort. On the other hand, trades which would appear likely to furnish subjects for the disease more frequently than those which have been already spoken of, fail to do so. This, in some instances, can be explained. Gold beating, for example, where an eight-pound hammer is used almost uninterruptedly for five hours, and is carried from above the shoulder down to the level of the waist, would seem to contradict this view, as the disease is unknown to one of the largest gold leaf manufacturers; a careful study of the movements of the operatives in performing this work, however, shows that the strain is not upon the muscles of the forearm, but rather upon those of the shoulder and arm; as the hammer descends simply by gravity and returns by recoil from the elastic block, composed of alternate sheets of gold and animal membrane, to a point where the biceps and deltoid muscles complete the elevation.

The exciting cause of the attack is usually the resumption of work to which the individual is thoroughly accustomed, after a shorter or longer interval, when he is out of practice, and when the parts involved in executing special movements have become less actively

nourished; though, in the case of the washerwoman, the clothes-wringer was used for the first time, and the rope twister was doing work that was new to him. In the laborer the attack was of traumatic origin.

*Pathology.*—The means of determining the exact lesion in this disease are necessarily to a certain extent conjectural, but as the pain and crepitation are coincident in their onset and subsidence, as there is no impairment of motion after recovery has occurred, and as the parts under treatment regain their normal condition in a very short time, it seems highly probable that there is no true inflammatory process at all, certainly none extending beyond the stage of congestion, and that the creaking which exists is due to insufficient lubrication, with consequent dryness, not, as has been supposed, to exudation of lymph. Under rest and counter-irritation the congestion very soon disappears, the synovial surfaces pour out their proper fluid, and the tendons once more move smoothly and noiselessly in their sheaths.

*Symptoms.*—Soreness, amounting to positive pain upon motion or pressure along the course of the affected tendons, inability to use the part, and the presence of the peculiar creaking, which is communicated to the finger on palpation, are the symptoms which denote the existence of tenosynovitis.

*Diagnosis.*—From its common seat upon the dorsum of the forearm, this affection may be mistaken for fracture of the radius. The history of the case, however, showing that there has been no blow or fall, as a rule; the quality of the crepitus, which is much softer and finer than that of fracture, and like that of cellular emphysema after fracture of the ribs, or that produced by rubbing two pieces of cloth between the fingers, and the way in which the crepitation may be elicited,—all leave little chance of error. The disease will not be mistaken for a strain of the muscle, if a careful physical examination is made.

*Treatment.*—From what has been already said, it will be seen that the disease is at once acute, painful, and disabling. It, however, yields, as a rule, readily to treatment; for the patient can seldom work more than a day after he is attacked, and finding that he exhausts the usual home embrocations, without relief, promptly seeks aid elsewhere; this enables the surgeon to institute treatment before an advanced stage is reached and permanent mischief done by a deposition of plastic matter. Absolute rest of all the parts concerned is the most important element in the treatment; a palmar splint, therefore, from the elbow to the tips of the fingers is applied, when the forearm is the part affected. Counter-irritation is next indicated, and may be employed in one of two ways. If the skin is red, a band one inch broad of tincture of iodine should be painted in an oval form around the area over which creaking is felt; while a lotion of lead water and laudanum is applied within this band. In cases where there is but slight creaking, and no redness of the skin, tincture of iodine may be painted directly over the diseased part, without the employment of any lotion. The dressing is re-applied each day, until all pain, tenderness, and creaking have disappeared, which generally occurs at the end of four or five days. After this a roller bandage alone is continued, until the parts have regained their tone.

## CORRESPONDENCE.

### LETTER FROM BERLIN.

*The Berlin Clinics—Profs. Virchow and Frerichs—  
The Bacillus Tuberculosis.*

THE old Berlin student will easily find his way about in the Charité grounds to the well-known clinics, am-

phitheatres, and post-mortem rooms, as the general disposition of the medical centres has not changed much in the last fifteen or twenty years. Moreover, if from our country, and doubtless from anywhere else abroad, he will receive the same kindly greeting from the same well-known celebrities to whom he listened with such eager attention in his student days. Virchow is still here, active as ever, lecturing and demonstrating every day, with the same ease and accuracy, wasting no words, omitting nothing important, quiet, undemonstrative, precise, incisive as of old, with the same twinkle of the eye at every merry bon-mot, or, what occurs oftener, at every bit of satire. Advancing years have dealt very gently with him, as, except for a few gray hairs, there is no difference from fifteen years ago. He says there is a difference; that he is not so industrious as then; but the crowds of students and the heaps of material about flatly contradict him. Perhaps it is not right to say it, but I rather suspect that the lacking volume to the *Geschwulst-lehre*, and the lacking new edition of the *Cellular-Pathologie*, are due to the difficulty—it was Harvey who said it of himself in an apology for not at once receiving Aselli's views—of accepting newer doctrines at a later time of life. Inasmuch as I am not writing for posterity, I may not hesitate to say that I heard, not the professor himself, *Gott bewahr*, but a man high in the pathological department, say that Cohnheim's discovery was a *kinderspielerei!* This is dreadful gossip, and I would not mention it if it did not keep repeating itself like an echo round about. At our distance we can easily see that corpuscular migration was a most valuable discovery, if only, like its immediate predecessors, as a stepping-stone to something else; for it brought us back more peremptorily than anything before it, to look into the blood itself for the cause of the disease. But I was speaking of Prof. Virchow. What else could a student say, after the first salutation, than to observe that he had come back to the source of the waters to learn something more and something new? And to this came the quick reply, with a little touch of irony perhaps, "*Es gibt hier Nichts wie Pilze jetzt!*" (there are nothing but germs here now). "It has been found out at last," he added, "that different germs can be colored different ways."

The regular didactic lecture to-day was upon osteo-myelitis, and it is needless to say that the subject was handled with the easy grace of the master. There are about a hundred students upon the benches (the classes here are divided), and they show up a group about as motley as with us. Most are in strained attention, some are listless, some are restless. It is a great fault at all the lectures which I attended to-day that students came straggling in for half an hour after time. The lecture was abundantly illustrated with specimens, wet and dry, arranged upon tables in front, though but one or two were really picked up, talked about, and handed about the class. The discourse was just such a chapter as one might read in any good text-book, but it was very clearly and distinctly rendered, and was easily in the comprehension of every student in the room.

Osteo-myelitis gave opportunity, of course, for something about parasites, and I listened eagerly for what I knew must come in the section on etiology. In this regard there was something of a disappointment. The presence of germs was admitted, the existence of various kinds which are now being so attentively studied, but it was insisted upon, with more emphasis than seemed justifiable, that these germs may act, not only vitally, so to speak, but also chemically; that is, may evolve in their living processes a toxic substance which acts like a poison of chemical nature, and thus produces the malign effects attending saines and ichor. This was the substance of what was said about germs in a very short time, considering the paramount importance

of etiology nowadays, while the bulk of the lecture was upon the pathological appearances of bone caries and necrosis.

Frerichs looks older than fifteen years ago; a most natural thing, indeed, but always an unwelcome thing to see in those whom we respect and esteem so much. If one would simply sit and listen with closed eyes, however, to his rich, deep, but distinct voice, as he sits upon the edge of the table, at the side of the bed, brought in before the class, he would not know that nearly a score of years had elapsed since he had heard the same words, so expressive of years of study and reflection.

Three cases came successively before the class—one of mastoid abscess, one of typhilitis, and one of cystopyelitis—a pretty good assortment for a hap-hazard clinic, as it was with me. A student is called down at each case, according to the German method, and the professor mostly talks to him, rather than to the class. If he looks up at all from the patient before him, it is at the student only, in expectation of an answer to the question addressed to him.

The first case was a good opportunity for the exhibition of a thorough clinical acquaintance with the cerebral circulation, in connection with the study of venous thrombosis, and it flowed as easily and voluminously as the current of a mighty stream. The typhilitic case was typical, and the lines were nicely drawn about peritonitis circumscripta and diffusa, ex continuata, contiguitate, and ex perforatione. But the chapter on etiology was not so full as that on symptomatology and treatment. It was the old citation of hardened feces, foreign bodies, constipation, and the like, without allusion to, or explanation of, the fact that most cases affect males, with whom constipation, etc., is more rare, and among tuberculous patients, in whom arrest of peristalsis and accumulation of specific toxic products are so wont to occur.

After the brief history of the third case had been read by the clinical assistant to the class, mentioning merely the localized pain, the fever, and a previous attack of gonorrhœa, and the flask of blood-colored urine, scant in quantity, rich in albumen, but devoid of casts, was shown, the professor looked up in his usual quiet way for a diagnosis. "Nephritis," said the student. "Nephritis is a big word," said the professor, "and covers a multitude of things." Hereupon followed a rapid exclusion of any form of nephritis, and an easy inferential diagnosis of urethritis, cystitis, and pyelitis in the simplest possible sequence. But with all this, the chapter on etiology was unsatisfactory again. It was the old story of inflammation from calculi (pyelitis calculosa, with an ore rotunda, hard to describe), from catheterism, gonorrhœa, etc., but not a word about specific germs of any form.

Truly, we may lament, as Darwin did, about his theory, in a later edition of one of his works, "that the honored chiefs of our science have not yet given in their adhesion to the later views."

I have not dared, as yet, to ask any of the "honored chiefs" what they thought about the bacillus tuberculosis, but Dr. Juergens, Virchow's first assistant for now over eight years (he has a book in press, by the way, and is about to describe a new disease, a new abdominal disease, so he told me to-day), shrugged his shoulders when I asked him about the bacillus tuberculosis. "We must wait awhile," he said. "I know that they are there, but I do not know that they are the cause of the disease." "Do you know Dr. Koch?" I ventured to inquire. "No, I have not seen him as yet, but I must look the subject up."

Nevertheless, the air rings with micrococci and bacilli about Berlin. It is something of a suppressed murmur as yet, and muttered mostly by the younger

men, but it is gathering in force every day, and, so far as I can see, it threatens soon to play like a whirlwind with many cherished views.

And there is one man who does know that the bacillus tuberculosis is a fixed fact in science, and who is able to convince any one that it, and it alone, is the cause of the disease. May I say that they only shrug their shoulders who have not had time, as yet, or inclination, "to work the subject up," that, as Mr. Huxley said of Darwin long ago, "those who disbelieve him have never read his works." But about them and him another day.

J. T. W.

BERLIN, June 20, 1882.

#### REMINISCENCES OF EARLY MEDICAL TEACHING IN NEW ENGLAND.

To the Editor of THE MEDICAL NEWS.

DEAR SIR: Several years ago I had the honor of receiving, from a member of the family of the late Dr. Mifflin Wistar, an original letter of Dr. Waterhouse, addressed to Prof. Caspar Wistar, a copy of which is now printed below. It is interesting on account of its statements respecting the history of American medicine in Colonial times, and as a literary relic of a man who was in Boston almost as eminent as Dr. Wistar was in Philadelphia. Their early career was very nearly the same. Both studied medicine at Edinburgh and at Leyden, although not at the same time, for Waterhouse was eight years older than Wistar. He was born at Newport, R. I., in 1754, and, after holding the Chair of Theory and Practice of Medicine in Harvard University from 1783 to 1812, died in 1846, at the patriarchal age of ninety-two.

Wistar, as every Philadelphia physician knows, or ought to know, was born in 1761, and died in 1818, aged fifty-seven years. This letter was addressed to him when he was at the height of his fame, in 1808, the very year in which he was promoted from the Adjunct Professorship of Anatomy to the Chair of Anatomy in the University, an office which he brilliantly illustrated until his death. Even twenty years after this untimely event, the memory of his eloquent teaching and benignant character was still fresh and influential in the traditions of the school.

Yours, very truly, A. S.  
3900 SPRUCE ST., PHILADELPHIA,  
June 10, 1882.

CAMBRIDGE, Sept. 22, 1808.

DEAR SIR: Your inquiries respecting the history of anatomical instruction in New England led me to make a critical investigation of this matter.

The first anatomical lectures ever given in this region was in 1754, at Newport, Rhode Island, by Dr. William Hunter, a young Scotch physician. They were delivered gratuitously to the principal gentlemen of that Island, and were very well received. By what I can discover, they were old Dr. Monro's lectures, as far as regarded the order and the physiological and pathological remarks. Dr. Hunter's son is a gentleman of distinction in the line of the law at Newport. He offered to show me his father's lectures in MS. I have often heard my own father speak of Dr. Hunter's lectures with great satisfaction. These anatomical lectures procured the young Scotchman considerable reputation, so that in two years after, viz., 1756, he was appointed Surgeon to the Rhode Island Regiment, destined to operate in Canada against the French. Soon after, Dr. Hunter married into one of the most reputable and opulent families in the Island; had the most extensive practice, and was actually the first man who ever practised midwifery in that colony. This gentleman was the father of the beautiful Miss Hunter,

*"the fairest among the fair."* Such a piece of anatomy and physiology mine eyes never beheld.

Dr. Wm. Hunter, beside a good medical education, possessed taste in the fine arts. He collected paintings, while his all-accomplished daughter celebrated his taste in music. When the British occupied Rhode Island, this gentleman gave strong evidence of his attachment to his countrymen, and was appointed physician to their military hospital, where he apparently caught a pestilential fever, which carried him off in a few days. I therefore consider Dr. William Hunter, of Newport, Rhode Island, the father of anatomical and surgical instruction in New England.

Perhaps it may be gratifying to your colleague, Dr. Woodhouse, to hear that in the year 1759 a short course of lectures and experiments in chemistry and electricity was given at Newport by my brother, Timothy Waterhouse, and by Solomon Southwick. They were given, not like Dr. Hunter's anatomy, publicly in the Court-house, but privately to about a dozen persons. The experiments related chiefly to the docimastic art. Boerhaave was their fulcrum. They believed in the transmutation of metals, and wasted their time and money in the delirious pursuit of making gold. Prior to this period a general literature was diffused through Rhode Island by means of the public library founded by Abraham Redwood, a Friend, the William Logan of Rhode Island, and well known, I presume, to the venerable James Pemberton, whom I regret not seeing. The residence of Dean Berkeley and of Dr. Stiles gave, I apprehend, a cast of science to my native place prior to most other spots in New England.

It may possibly be equally gratifying to your other colleague, Dr. Barton, to learn that the first public lectures on botany and on mineralogy in New England were given at the Rhode Island College in the summer of 1786. Two years after, this course of lectures was given at the University of Cambridge by the same person, and has been continued by him in an humble style ever since. The printed sketch, or first outlines of them, you have already in your hands. Give my regards to Dr. Barton, and tell him that I regret that time was not allowed me to see more of him. My best regards to Dr. Woodhouse, who must not fail to let me see him when he again comes this way. I have forwarded his letter to Dr. Prince.

To be journeying a whole month without a single half hour of bad weather; to return in high health, and to find my family equally well; to learn upon inquiry that no inconvenience had occurred in my business, were events too agreeable almost to be expected; yet I enjoyed all this. In addition to it, I was able to look back on my excursion from home with entire satisfaction, and shall never recollect but with sentiments of affection, the cordial reception and marked attention which I have received from my brethren in Philadelphia, among whom I shall always remember Dr. Wistar with peculiar satisfaction.

The only take off to the pleasure of my journey from your city to this place, was the queer, the very queer, conduct of my companion. I remained a day extraordinary at Rhode Island for his gratification; I carried him in a chair to see the island; I endeavored to pay that sort of attention to him which I supposed would please any man who had eyes to see or heart to feel; but all my efforts at Newport to introduce him to the best and the most beautiful company were so ungraciously received that I gave it up in despair. He took one way to Boston and left me to take another. He has just called on me with Dr. Spooner, and made a sort of apology. The man has shown his wisdom in not marrying. Mrs. Waterhouse joins me in respectful remembrance to Mrs. Wistar and sister, and would be very glad to see them, or any of their friends, at Cam-

bridge. Compliments to Dr. Currie, Judge Smith, and son. I shall write to Dr. Seybert to thank him for his pains in showing me his interesting collection of minerals.

The day after I arrived we had an equinoctial gale, and last night we had ice; and I write this by a good fire. Tell Robert Proud, I very much regretted that I was hindered from visiting him, as well as from visiting the nestor of our society. I remain, with a high degree of esteem,

Your friend,  
BENJAMIN WATERHOUSE.

DR. CASPAR WISTAR,  
Professor of Anatomy, etc. etc.,  
Philadelphia.

#### RESULTS OF VACCINATION.

To the Editor of THE MEDICAL NEWS.

SIR: Having read the correspondence of several members of the profession in regard to some rather peculiar results of vaccination, I would say, in answer to the request, that my experience during the past winter has been quite similar to that reported from Illinois. I used ivory points, and quills with efficient results. The peculiar results of vaccination that I desire to repeat, are as follows:

CASE I.—Female, aged 14, well nourished, and of healthy parents, vaccinated January 2d; ten days from above date patient had a severe rigor, followed with pyrexia. Patient took to bed, where she remained four or five days, arm swollen to elbow, vesicle as large as a five-cent piece, vomiting, nausea, and a quite severe headache. At fourteenth day the swelling had extended to tips of fingers, and the arm was about thrice its normal dimensions; patient also suffered from "darting pains" in the arm. At sixteenth day crust had formed, which was now as large as a half-dollar silver coin, and surrounded by a dark-red areola outside of which numerous little vesicles made their appearance, which in time became pustules, and again the site of small crustations. When the large crust came away it left a deep ulcer, which healed slowly under carbolized cosmoline. The length of time from vaccination to time of perfect recovery was about twenty-two days.

CASE II.—Female, aged 22, single, well developed, menstruation regular, vaccinated December 28, 1881. Eighth day from time of vaccination patient had a chill followed by fever, and intense swelling of arm and forearm, vomiting, nausea, very foul breath, and severe headache; patient took to bed, where she remained four or five days, when the crust had formed which, in this case, was about the size of a two-cent copper coin. As the crust came away a large deep ulcer remained, which healed readily under a bandage.

CASE III.—Sister to Case I., aged 7, healthy, vaccinated January 2; about seventh day from time of vaccination, quite severe stomach trouble, with rise in temperature, was manifested, which continued for about three days, and at the same time the vaccination passed through its regular course. The peculiarity in this case was that about three weeks after the subsidence of all symptoms of vaccination an eruption, very similar to rubella, made its appearance on the trunk and lower extremities; no itching, no other symptoms of measles or scarlatina; and after a duration of three days passed away without treatment. Whether this eruption bore any relation to the vaccination, I am unable to say.

I have never before, nor since, witnessed results of vaccination similar to those above related.

Respectfully yours,  
J. A. WESSINGER, M.D.

HOWELL, MICH., July 8, 1882.

## NEW INVENTIONS.

### DESCRIPTION OF A CANULATED NEEDLE FOR INTRODUCING WIRE SUTURES IN SURGICAL OPERATIONS.

BY GEORGE MCCLELLAN, M. D.,  
OF PHILADELPHIA.

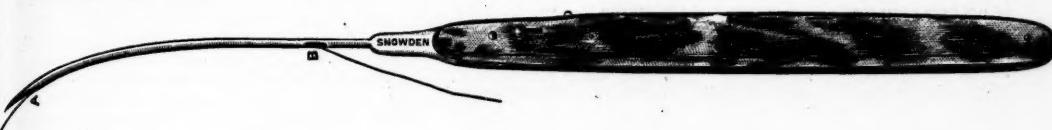
THE annoyance caused by the wire suture catching in the tissues on account of the doubling and twisting necessary to retain it in the eye of the ordinary needle is often very great, and the excessive oozing caused by the procedure most injurious.

In order to overcome this difficulty I had a little instrument constructed for me by Mr. Snowden, surgical cutter, No. 7 South 11th Street, which I have been constantly employing for several months in all operations where the approximation of the edges of the wounds required the introduction of wire sutures.

It consists of a long slender canulated needle, having a slit at the point, and another at the shoulder, where it joins the handle.

useful in taking the place of a tenaculum or artery forceps, either of which often loosen or tear away the ligature when they are being removed. I simply pass the needle through a bleeding point, then just forward the wire and withdraw the needle, leaving the wire so that it can be doubled into a loop, traction upon which will enable an assistant to throw a ligature completely round the vessel or bleeding point, as readily as a tenaculum, with this advantage, that as soon as the vessel is secured the wire may be cut, thereby avoiding the danger of displacing the ligature. This form of needle may also be used for the purpose of exploring. Upon introducing the point into a part where blood, serum, or pus is suspected to have accumulated, the fluid, if any exist, will pass through the needle and appear at the slit near the shoulder.

Objection may be raised to this form of needle on the score of the possibility of its conveying septic matter, but the same fault may be found with the hypodermic syringe, and it can readily be remedied by always retaining a piece of wire within the canulated needle when out of use and never forgetting to dip it in carbonized oil, both before and after it has been employed.



A and B indicate the two slits or openings in the needle through which the wire is passed. When introducing the canulated needle, the wire is of course either retracted or withdrawn, but as soon as the point A issues at the desired place the wire can be pushed forward, seized, and the needle withdrawn.

Although the idea of such a needle was entirely new to me when I first had it constructed, I have since learned that it was suggested and used by several surgeons many years ago. Dr. W. L. Atlee used a needle on this principle in his operations for ovariotomy, and Dr. Paul B. Goddard had needles of various sizes and forms for the purpose of passing wire sutures; but neither of these surgeons appear to have encouraged their general use.

The ordinary forms of needle, including the "screw-hole," and the "gutter-eyed," as well as the more recent suggestion of Dr. Morgan, of Baltimore, all require considerable time in their manipulation, and in many instances must be grasped by a holder that they may be properly introduced. In all of them the wire is apt to become caught in the tissues, or dislodged from the eye or stylet unless great care is taken to prevent it. The advantages of a canulated needle, such as is shown in the accompanying figure, will be apparent at a glance. The simple direct puncture of the needle will be found to occasion very little oozing, and as the handle offers firm support in the hand of the operator, great accuracy in the introduction of the sutures and complete exactness in the apposition of the parts are attained, the needle being made to transfix both margins of the wound at the same time, and the wire, when passed through taking its place.

The tearing of the knotted wire about the eye of a needle often causes a laceration instead of a puncture, and in some regions, as in the perineum or vagina, this minute rent is very apt to tear further when the sutures are tightened. The wire should always be carefully straightened by running it over the edge of the thumb nail to avoid any kinks which might interfere with its passage through the canulated needle. With this precaution it may then be introduced with much greater rapidity and precision than in any other way.

I have also found that this little instrument is very

I need hardly say that the needle can readily be made straight or curved, as may be desired, but the form shown in the accompanying figure, which is designed for the pocket-case, will, I think, answer most purposes.

## NEWS ITEMS.

### LOUISVILLE.

(From our Special Correspondent.)

**THE UNIVERSITY OF LOUISVILLE.**—The Board of Trustees of the University of Louisville has elected Dr. John A. Osterlony to the Chair of Materia Medica, Therapeutics, and Clinical Medicine in the medical department of the University. Dr. L. S. McMurtry has been elected Demonstrator of Anatomy in the same institution.

**THE NEW YORK CODE.**—The action of the American Medical Association, and other representative societies in relation to the "new departure" in New York, meets with universal approval throughout this State.

### BALTIMORE.

(From our Special Correspondent.)

**THE FACULTY OF THE BALTIMORE COLLEGE OF DENTAL SURGERY.**—The vacancy caused by the withdrawal of Dr. James H. Harris from the Faculty of the Baltimore College of Dental Surgery, has been filled by the appointment of Dr. M. Whilldin Foster. Dr. R. B. Winder has been elected Dean of the Faculty, succeeding Dr. F. J. S. Gorgas, resigned.

The Faculty has been increased by the election of Drs. O. J. Coskery, Clinical Professor of Oral Surgery; C. F. Bevan, Professor of Anatomy, and Richard Gundry, Professor of Materia Medica and Therapeutics.

The three last-named gentlemen are also members of the Faculty of the College of Physicians and Surgeons.

**BALTIMORE MEDICAL COLLEGE.**—Dr. Archibald Atkinson has been elected Professor of the Principles and Practice of Medicine in the Baltimore Medical College.

A NURSE DIRECTORY, organized under the direction of the Medical and Chirurgical Faculty of Maryland, has been established, under the management of a committee of the Faculty, under the immediate charge of Dr. Wm. F. Lockwood. It is meeting with very encouraging success.

#### VIENNA.

(From our Special Correspondent.)

**PROPHYLAXIS OF BLENNORRHœA NEONATORUM.**—Dr. Felsenreich, First Assistant in Prof. C. v. Braun's clinic, related at the last meeting of the Imperial and Royal Society of Physicians his experience in the prophylaxis of blennorrhœa neonatorum. Of five hundred trial-children, only two were sent into the Foundling Hospital with a light form of blennorrhœa. The results of his own experiments, and those of Dr. Borysikiewicz, Privat Docent, had created such confidence in Crédé's prophylactic treatment that both Carl and Gustav Braun recognized it as routine treatment for every child born in their respective wards. In the time from March 1, 1881, to April 1, 1882, three thousand children were treated after Crédé's method, and fifty-eight were sent to the Foundling Hospital with "sick eyes," 1.93 per cent., while a large number of children, treated according to an earlier method, simultaneously, gave a percentage of 4.34 of "sick-eyed" children. According to the view of Dr. Felsenreich, some special person must be entrusted with this duty, so that the midwife may have nothing whatever to do with the eyes of the new-born infant. He is of the opinion that the bathing-water is not instrumental in the communication either of catarrhal or blennorrhœal inflammations. Hausmann's and Olhausen's prophylactic treatment, *i. e.*, washing away the *materies morbi*, the vaginal secretions, from the eyelids and eyelashes with a solution of carbolic acid in water, he rejected totally, as being entirely inapplicable with midwives, who were sure to be careless in its administration. Crédé's two methods: (1) washing out of the maternal genitals to prevent contact of the secretion with the conjunctiva, and (2) the introduction into the conjunctival sac of a corrosive fluid, such as a 2 per cent. argent. nitricum, so as to destroy the poisonous principle, are the methods now in vogue in these two clinics.

Hofrath Arlt, presiding officer, alluded to the difficulties, in the first days, of differentiating between catarrh and blennorrhœa. These difficulties totally invalidated the results of Dr. Königstein, undertaken in Prof. Spaeth's wards. The incubative stage of blennorrhœa is at least eight days; he was pleased that it was generally recognized that one had to contend with an infectious disease.

**OBSTETRICAL NOTES: DILACERATION OF THE UMBILICAL CORD.**—A strong woman gave birth to a child, while crossing the tracks of a tramway; the child fell upon the street-sand and the umbilical cord was torn in two. The child weighed 3200 grm., is perfectly healthy, and shows no sign of any contusion. The tear in the cord is about 10 cm. removed from the umbilical ring. This, however, is not the usual locality for dilaceration, in an upright or elevated position, to occur; for in this position rending generally brings with it a piece of the abdominal skin of the child or of the placenta, and tears it in its course, so that the division occurs 2-3 cm. removed from the umbilical ring. This matter is of great

importance in a medico-legal aspect, where there is a suspicion that the mother herself has torn the cord in two, and then has laid the child aside. This suspicion can always be entertained when the remnant of the umbilical cord is long enough to admit of being grasped and torn. That avulsion of the umbilical cord generally is possible, the researches of Prof. Spaeth have abundantly proved. An average resistance of 5½ kilos., with fresh umbilical cords, has been determined by this investigator. The weight of a new-born child, 3 kilos., falling through the air, can readily overcome this resistance. Although in births in upright positions, not all umbilical cords are torn in two, yet the dilaceration is favored by a stretched course of the vessels, and by an absolute shortness of the umbilical cord. Avulsions of relatively short umbilical cords, that is, when the cords are wrapped around the necks or other portions of the bodies of children, occur very seldom during the act of birth.

A pertinent question is, can the life of the child be threatened by the indirect danger of hemorrhage? This danger only exists with feeble, asphyxiated children, and then only when the child is still in the maternal body. With strong children, however, who cry lustily, and breathe freely, it is possible to cut or tear in two the umbilical cord immediately after birth, and allow the child to lie without tying the cord; at highest estimate a coffee-spoonful of blood will escape. The vessels of the umbilical cord contract at once; their occlusion is favored by the circular fibres of the intima, and hemorrhage is arrested. On this account the verdict upon dead foundlings, by country physicians, "death in consequence of hemorrhage from the umbilical cord," is always to be regarded with a certain amount of suspicion and distrust.

**THE LEWIS COUNTY (NEW YORK) MEDICAL SOCIETY AND THE NEW YORK CODE.**—At the Annual Meeting of the Lewis County Medical Society the following resolutions were unanimously adopted:

*Resolved*, That the delegate from this Society to the New York State Medical Society is hereby instructed to use all honorable means in his power to have the New Code adopted at the last meeting of the State Society repealed. And, further, that he shall endeavor to have a special committee appointed to confer with the leading physicians in every part of the State as to their views regarding any changes desirable to be made in the by-laws and Code of Medical Ethics.

*Resolved*, That the above be published in the MEDICAL NEWS.

**HEALTH IN MICHIGAN.**—Reports to the State Board of Health for the week ending July 1, 1882, indicate that measles, typho-malarial fever, inflammation of the bowels, intermittent fever, whooping-cough, and puerperal fever, have decreased in area of prevalence. There was no marked increase in any disease reported. Including reports by regular observers, and by others, small-pox was reported present during the week ending July 1, and since, at four places, as follows: at Detroit and Grand Rapids; at Kalamazoo (one case, convalescent), July 3; at Flint (many cases), July 5.

**LIGATION OF THE INNOMINATE ARTERY.**—On Friday, June 9th, Mr. WILLIAM THOMSON, at the Richmond Surgical Hospital, Ireland, tied the innominate artery in a man, aged 45 years old, who was suffering from a large aneurism, involving the second and third parts of the subclavian artery, and three and a half inches in diameter. An ox-aorta ligature, one-sixth of an inch in diameter, was employed, and was passed round the innominate artery by means of the instrument specially devised by Mr. Barwell for the purpose. On

the third day the tumor felt firm, and was already diminished in size; the wound remained aseptic, only a small quantity of serum oozing from the drainage tube. On the thirteenth day, the pain, from which the patient had suffered much before operation, had completely disappeared, and sensation was returning in the right arm, which had been paralyzed for several months by the pressure of the aneurism on the brachial plexus. The tumor is smaller and absolutely still, and the wound had entirely healed, except at one point, kept open by a few threads of catgut. The pulse is 98, and the temperature normal.

The result of this operation is of considerable interest, on account of its gravity and rarity. Fifteen cases of the operation are on record, of which only one, that of Smyth, of New Orleans, recovered. In this case there was severe secondary hemorrhage, and it became necessary to ligature the vertebral and internal mammary arteries.

**SUCCESSOR TO PROF. VON BRUNS.**—For the chair left vacant by the death of Prof. von Bruns, the Tübingen Faculty has sent in its list of recommendations, placing Prof. Bergmann, of Würzburg, first; Profs. Socin, Maas, and Schede, second; and Prof. Bruns, Jr., third.

**APPOINTMENTS.**—Dr. Herman Knapp has been appointed to the Chair of Ophthalmology, and Dr. Newton M. Shaffer to that of Orthopedic Surgery, in the Medical Department of the University of the City of New York. Dr. Stephen Smith has been transferred to the Professorship of Clinical Surgery.

**ASSAULT ON AN INSANE HOSPITAL SUPERINTENDENT.**—Dr. Orange, the Superintendent of the Broadmoor Asylum, England, was assaulted by Rev. H. J. Dodwell, an insane patient. Dr. Orange was struck on the head with a stone slung in a handkerchief, but was only slightly injured as he was able to seize his assailant and defend himself until aid came.—*Med. Times and Gaz.*, June 17, 1882.

**M. PASTEUR.**—The Council of the Society of Arts of Great Britain have awarded the Albert Medal of the Society for the present year to M. Pasteur, Member of the Institute of France, for "his researches in connection with fermentation, the preservation of wines, and the propagation of zymotic diseases in silkworms and domestic animals, whereby the arts of wine making, silk production, and agriculture have been greatly benefited."

**THE President of the Royal Academy of Belgium** has been invited by M. J. B. Dumas, Perpetual Secretary to the French Academy of Sciences, to join in the subscription organized by the members of various French learned bodies for a medal to be presented to M. Pasteur for his scientific discoveries.—*British Med. Journal*, June 24, 1882.

**PROF. NOTHINAGEL,** of Jena, has been selected to fill the chair of Clinical Medicine and of Special Medical Pathology and Therapeutics at Vienna, made vacant by the death of Duchek.

**PROF. CARL SCHROEDER,** the Director of the Gynecological Clinic of Berlin, has been decorated by the King of Prussia, with the Cross of the third class of the Order of the Red Eagle.

**DR. DUJARDIN-BEAUMETZ** has received the Chateau-villard Prize of 1500 francs for his "*Leçons de Clinique Thérapeutique*."

**THE BROCA SUBSCRIPTION.**—The sum subscribed to defray the expenses of a monument in honor of the late Paul Broca amounts to 22,449 francs.

**GUITEAU MANIA.**—*The British Medical Journal* for June 24th contains a well-written editorial on Guiteau's insanity, from which we make the following extracts:

"Was there ever," asked Dr. William A. Hammond when recently addressing the New York Medico-Legal Society on the case of Guiteau, "was there ever a man whose whole career, from childhood to the present day, has afforded a more striking example of that form of mental derangement called reasoning mania?" and seeing that what Dr. Hammond calls reasoning mania is synonymous with what he might as correctly call arrant roguery, the answer which he anticipates and desires may be given to this question. That Guiteau has been an arrant rogue, or, according to this new self-contradictory euphemism, a reasoning maniac, from his youth up until now, will scarcely be denied by anyone who has glanced at the reports of his trial; and we fail, therefore, to perceive the necessity for the elaborate proof which Dr. Hammond adduces in support of this self-evident proposition. It may be well to examine Dr. Hammond's position, and inquire what justification he has for applying the term lunatic to the assassin of President Garfield.

We do not now enter upon the general question whether it is expedient to divide lunatics into two classes, one of which shall be amenable to penal discipline, and the other only to medical treatment, further than to say that to do so would be to run counter to all advances hitherto made in the medical jurisprudence of insanity, and to create difficulties greater than have yet been experienced in the administration of the law. Efforts have heretofore been directed to reconcile the legal definition of insanity with the scientific description of it; and the attempt to force these two asunder, to limit the former to a small group of idiots and raving madmen, and to extend the latter so that it shall include half the human race, can only end in inextricable confusion.

Now, what do all these evidences of insanity brought forward by Dr. Hammond amount to but the description of the career of an unscrupulous and sanguinous adventurer? Are there not thousands of men in the United States and every civilized country whose lives, if carefully reviewed, would present as many mad points as that of Guiteau—mad points which make a specious show when brought together, but which are really of no account when scattered over long tracts of commonplace rational conduct? . . . Taking these proofs individually, there is not one of them that bears the stamp of madness; and, taking them collectively, they are incompatible with any theory of mental aberration. Insanity is often regarded as a lawless condition, of which anything and nothing may be equally predicated; for it seems to those who look upon it carelessly from afar to be a wild storm of thought, blowing where it listeth, and without centre or limitations. To those, however, who have studied it more closely and discerningly, there are revealed order in its ravages, and system in its cycles; and to them it becomes possible to say, in many instances, what course it will pursue, what features are characteristic of it, and what conjunctures are never witnessed in it. And skilled students of mental meteorology of this kind, who are free from personal bias and the thrall of premature judgments in print, will certainly say that Guiteau's case, as described by Dr. Hammond, is not classifiable under any variety of insanity with which they are acquainted.

But Dr. Hammond's description of reasoning mania is not in conformity with medico-psychological experi-

ence on this side of the Atlantic. Such lunatics are not to be met with in asylums. They are a new discovery in the fauna of insanity in the United States; and we would suggest to Dr. Hammond that, as Guiteau is the most striking specimen of this kind of lunatic that has yet been discovered, he should substitute for the cumbersome and inconsistent name that he has adopted, the unmistakable designation of "Guiteaumania." We should then, with greater facility, be able to discuss with him the symptoms and medico-legal relations of this unique variety of mental alienation, as he would call it, or of moral turpitude, as we should prefer to designate it.

We have said that Guiteaumania is not recognized in Europe as a form of mental disease either involving irresponsibility or calling for curtailment of liberty or medical treatment. It may be admitted at once that Guiteau had an ill-balanced and depraved mind; but to this admission it must be added that he was not, in these respects, a whit worse off than three-fourths of the inmates of our convict prisons, who are notably infirm of purpose and inconsequential in thought, but who are nevertheless treated like accountable beings. The shrewdness and perspicacity which Guiteau displayed in his running accompaniment of interruptions throughout his trial, render it impossible to argue that his intellect is in any degree enfeebled. His power of apprehension and of foreseeing the drift of any questions asked, was uncontestedly proved on innumerable occasions to be unusually acute; his memory was repeatedly shown to be tenacious and serviceable; and his judgment, when applied to the actions and motives of others, was often exhibited in a favorable light as regards its clearness and penetration. The anxiety which Guiteau displayed about his personal safety, and the precautions he took to secure it, are sufficient evidence that he is amenable to ordinary human motives; and the self-restraint which he more than once exercised when it suited his purpose to do so, betokened the possession of ample volitional power at his command. His crime was not a reckless and motiveless one, nor can it be said that it was prompted by any delusive belief. Of course, but few crimes have one sufficient motive; most are the resultants of several convergent mental forces: and so in Guiteau's case it may be impossible to put one's finger on any single spring of action, and say this impelled the fatal bullet; but still it may be safely averred that, in his itch for notoriety, his disappointments, his miscalculations, there is enough to account for his guilty performance without resorting to any theory of insanity in explanation of it.

#### NOTES AND QUERIES.

##### TREATMENT OF FRACTURE OF THE HUMERUS.

To the Editor of THE MEDICAL NEWS.

Dear Sir: In connection with the hypothetical case of fracture of the humerus, presented to the section on surgery of the American Medical Association (see THE MEDICAL NEWS, July 1, 1882, p. 24), by Dr. McLean and condemned by Dr. Sayre, allow me to report a case recently treated by myself with the best result attainable.

A boy aged ten years, healthy, broke the humerus by being thrown from a horse; the fracture was oblique and in the middle third near the junction with the upper third; the end of the bone was much displaced, with no, or but little, laceration of soft parts; having brought the parts into apposition, I applied a roller from phalanges to axilla; on this internally from axilla to condyle of humerus, I placed a double thickness of pasteboard (bonnet board), the same externally, from acromion to condyle; this allowed free passive motion; the hand was placed in sling and arm fastened to the body by several turns of roller, passive motion, however, was used every two or three days. At the end of two weeks the splints were removed, the arm being kept in sling some time longer. The best result was attained at the least possible incon-

venience to the patient, and I will pursue the same treatment of fracture of the middle third of the humerus in the future.

Very respectfully, etc.,

J. M. BERRIEN ROGERS, M.D.  
CLARKSVILLE, IND., July 6, 1882.

#### THE POISONOUS ACTION OF SALIVA.

To the Editor of THE MEDICAL NEWS.

Dear Sir: In your issue of July 8, there is a communication from Dr. Geo. M. Sternberg respecting some remarks made by Dr. Formad at a meeting of the West Philadelphia Medical Society, published in the MEDICAL NEWS of May 27 (p. 585). Dr. Formad, in the course of those remarks, has also made a mistake with reference to the results obtained by me.

He says: "A student of mine, Mr. Claxton, made a number of experiments, and could not corroborate some of Dr. Sternberg's conclusions. On the contrary, he found that any saliva, even that of animals, promptly killed those experimented upon."

Why Dr. Formad made this assertion, I cannot imagine, since the only salivas used by me were human and that of dogs dead of hydrophobia, and the latter only collaterally, as my investigations were wholly with respect to the former, i.e., human saliva.

In order that Dr. Sternberg may see my views on this subject, I would refer him to my article in the *Philadelphia Medical Times*, of June 17, 1882, p. 627 *et seq.* He will find, I am gratified to state, that the results I have obtained accord, for the most part, with his.

Respectfully yours,

CHARLES CLAXTON, M.D.

ATLANTIC CITY, N. J., July 9, 1882.

#### OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT, U. S. ARMY, FROM JUNE 27 TO JULY 10, 1882.

By direction of the Secretary of War, the Medical Examining Board convened in New York City by S. O. No. 223, October 30, 1877, from A. G. O., is dissolved, to take effect June 30, 1882, and the following-named officers, now members of the Board, will report by letter to the Surgeon-General:

Major JOSEPH B. BROWN, Surgeon.

Major JOSEPH H. BILL, Surgeon.

Major CHARLES H. ALDEN, Surgeon.

—S. O. 147, A. G. O., June 26, 1882.

GARDNER, E. F. Captain and Assistant Surgeon.—Relieved from duty at Vancouver Barracks, Washington Territory, and assigned to duty as Post Surgeon at Fort Coeur d'Alene, Idaho.—S. O. 83, Department of the Columbia, June 19, 1882.

O'DONNOGHUE, F., Captain and Medical Storekeeper.—Died at New York City, June 29, 1882.

HEAD, JOHN F., Lieutenant-Colonel and Surgeon.—Granted leave of absence for fifteen days.—S. O. 153, A. G. O., July 3, 1882.

FORWOOD, WM. H., Major and Surgeon.—To report in person to the Lieutenant-General at Fort Washakie, Wyo., on or about July 23, 1882, for duty as Surgeon and Naturalist on a tour of inspection and exploration to be made, by the Secretary of War and the Lieutenant-General.—S. O. 70, Department of the Platte, July 6, 1882.

BARNETT, RICHARDS, Captain and Assistant Surgeon.—To accompany the Brigadier-General commanding on his journey to Forts Bridger, Wyo., and Thorneburgh, Utah.—S. O. 70, Department of the Platte, July 6, 1882.

Under the provisions of Section 1 of the Act of Congress, approved June 30, 1882, the following-named officers are, by operation of law, this day retired from active service, viz.:

Brigadier-General JOSEPH K. BARNES, Surgeon-General.

Colonel JOHN M. CUYLER, Surgeon.

Colonel WILLIAM S. KING, Surgeon.

Lieutenant-Colonel JAMES SIMONS, Surgeon.

—S. O. 151, A. G. O., June 30, 1882.

THE MEDICAL NEWS will be pleased to receive early intelligence of local events of general medical interest, or which it is desirable to bring to the notice of the profession.

Local papers containing reports or news items should be marked. Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS should be addressed to No. 1004 Walnut Street, Philadelphia.